

# Modern

# LITHOGRAPHY

DECEMBER - 1954 - VOLUME 22 - NUMBER 12



Christmas greeting cards are keeping the mails busy nowadays, just as they have been keeping many offset presses busy during past months (See Pg. 5).

*In this issue*

Color TV Forum Report • New Dry Offset Experience  
PIA Convention Report • Ink-Water Balance on Press

**Medium Chrome Yellow 138P**

## Senelith Inks

Were the first lithographic inks  
made from dyestuffs  
treated with sodium tungstate  
for better sunfastness  
and are still leading  
with their outstanding resistance properties

*We wish to express our thanks to our many friends for the splendid cooperation given us for the past year, and extend our Best Wishes for the Prosperous Years to come.*

**The Senefelder Company, Inc.**

*"Everything for Lithography"*

**32-34 Greene Street**

**New York 13, N. Y.**



# BALDWIN



"I'll recommend them to anybody. They more than pay for themselves," says Frank Watson, veteran lithographer of 22 years and foreman for the past 10 years of the metal decorating division of R. M. Hollingshead Corp., Camden, N. J.

## INK FOUNTAIN AGITATORS

"They're a good team," says Frank.

"The agitator saves ink, spreads it evenly, forces it constantly against the fountain rollers, keeps colors even throughout the run. Good on either short or long runs—saves clean-up time, eliminates crust after 'time outs' and lunch hours.

"The water levels provide consistent moisture control—and, in combination with the agitator, give us a total check on color, increasing both production and quality.

"Both are simple, easy, and fast to install and no maintenance problems. We wouldn't be without them."



## and WATER LEVELS

Baldwin Press Washers, Water Levels, Ink Fountain Agitators, Water Stops and Vibrating Rollers are SOLD, INSTALLED and SERVICED BY

# ROBERTS & PORTER

INCORPORATED

General Offices: 555 West Adams St. CHICAGO

Write for a list of the hundreds of plants now using Baldwin Ink Fountain Agitators and Water Levels

NEW YORK  
622-626 Greenwich

BOSTON  
88 Broad St

CINCINNATI  
229 E. 6th St.

KANSAS CITY  
1434 Wyandotte St.

DETROIT  
1025 Brush St.

BALTIMORE  
5 South Gay St

LOS ANGELES  
344 N. Vermont Ave.

CLEVELAND  
1825 East 18th St.

SAN FRANCISCO  
1185 Howard St.

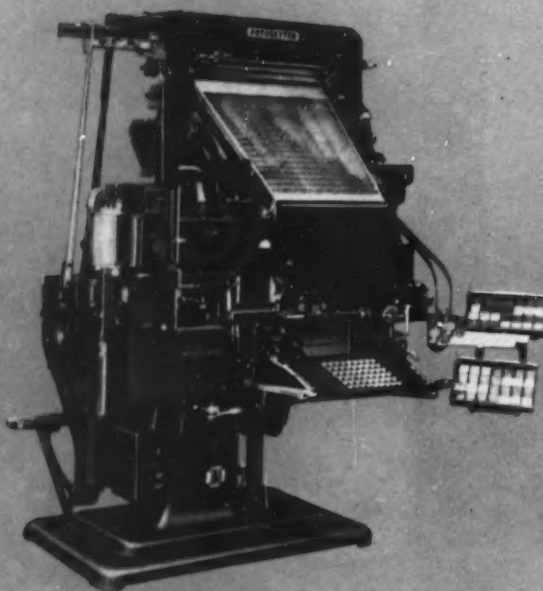
PHILADELPHIA  
1205 Hamilton St.

SEATTLE  
119 Jackson St.

You are invited to prove to yourself the advantages of the Baldwin Team for 30 days' free trial. Write today

ALL ORDERS SHIPPED FROM THE R&P OFFICE NEAREST TO DESTINATION

# The Intertype Fotosetter is



# PROVED

## PROVED PRINCIPLES

The circulating matrix has been serving the graphic arts since 1886. It was sound then, and it is sound today in the form of the Fotomat—a matrix bearing a photographic negative character patented by Intertype for photographic line composition. This principle is not available to *anyone* else.

## PROVED PERFORMANCE

The Fotosetter has been proved by the only real test—years of successful operation in important plants from coast to coast, where the demand for top efficiency and top quality is a *must*. Among many users are leading lithographic firms, trade typesetting houses and daily newspapers.

*And remember . . . when you sit down to a Fotosetter, you immediately begin setting type without first punching tape. One unit and one operation does it!*

*If it isn't made by Intertype, it isn't a Fotosetter*

## INTERTYPE CORPORATION



360 Farman Street, Brooklyn 1, N. Y.  
Chicago, San Francisco, Los Angeles, New Orleans, Boston  
In Canada: Toronto Type Foundry Co. Ltd.—Toronto, Montreal, Winnipeg, Vancouver, Halifax

Fotosetter and Fotomat are registered trademarks • Fotosetter Government Model, Fotoset Bold and Fotoset Standard

# Modern LITHOGRAPHY



## THE COVER

Greeting cards take many forms, and account for a large volume of offset lithography. These cards on the cover were selected from cards produced by member firms of The National Assn. of Greeting Card Publishers, New York.

ROBERT P. LONG  
Editor

CHICAGO OFFICE  
333 North Michigan Ave.



## In This Issue

Editorials .....	35
LTF Holds Color TV Forum.....	36
<i>By H. H. Slawson</i>	
Will There Be Enough Manpower?.....	39
Dry Offset—Engravers by Default.....	40
<i>By E. W. Thomas</i>	
PIA Discusses Web Offset.....	42
Photo Composing, Maintenance, Part 9 (Conclusion)	45
<i>By Charles Latham</i>	
Self Advertising Awards Announced.....	46
Photographic Clinic .....	49
<i>By Herbert P. Paschel</i>	
Technical Section	
Ink-Water Balance in Printing.....	51
<i>By George W. Jorgensen</i>	
Technical Briefs .....	54
Through the Glass.....	67
Metal Decorating Section	
Vinyl Coatings in Metal Decorating.....	69
<i>By A. C. Schultz</i>	
News About the Trade.....	77
Litho Club News.....	97
Equipment, Supplies, Services.....	101
Classified Advertisements .....	111
Annual Index to Articles and Authors.....	117
Index to Advertisers.....	123
Tale Ends .....	124

## MODERN LITHOGRAPHY

VOLUME 22, NUMBER 12

DECEMBER, 1954

**SUBSCRIPTION RATES:** One year, \$3.00; two years, \$5.00. Canada and Pan America, one year, \$4.00; two years, \$7.00. Foreign, one year, \$7.00; two years, \$12.00. Group subscriptions (U. S. only) Four or more entered as a group, \$2.00 each. (May be sent to different addresses.)

WAYNE E. DORLAND, *President*. Published monthly on the 15th by Industry Publications, Inc., New York, N. Y. Advertising and Editorial Office, Box 31, Caldwell, N. J. Advertising rates made known on application. Closing date for copy—15th of the month previous to date of issue. Reentered as Second Class Matter May 12, 1953, at the Post Office at New York, N. Y., under the Act of March 3, 1879.

Address all correspondence to Box 31, Caldwell, N. J.

PAPER is the base  
of <sup>his</sup> the  
job



### TICONDEROGA TEXT

A paper that makes the best of fine letterpress and offset printing. Watermarked Ti-Text is the choice for quality work at low cost... the logical paper for booklets, programs, announcements, and similar literature. Available in seven wanted colors, plus Cream and Brite White... laid or wove finish, plain or deckle edges. Choice of 60 lb., 70 lb., and Cover weight... envelopes to match.

**THE PRESSMAN** is the "makeready" man... checks ink, paper... his job is to make a good impression.

  
**International Paper** COMPANY

FINE PAPER AND BLEACHED BOARD DIVISION

220 East 42nd Street, New York 17, N. Y.





Velva-Tone—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

## CUT CLEAN-UP TIME

*with job-designed offset blankets*

**VELVA-TONE** offset blankets by Goodyear are designed and built to save you time and money from start to finish of your run. They go on the press easier. They minimize make-ready. They eliminate break-in. They give you remarkably fine reproduction over greater mileage. And they scrub-up easily to cut clean-up time.

Carefully compounded synthetic rubber and a unique

surface texture are the features that minimize clean-up. Uniform gauge, low stretch, full flexibility and abrasion resistance are other outstanding properties that result in savings before and during the run.

See your nearest distributor for full details on **VELVA-TONE**—the offset blankets made to the world's highest standard of quality. Or write to Goodyear, Printers Supplies Sales Dept., New Bedford, Mass.

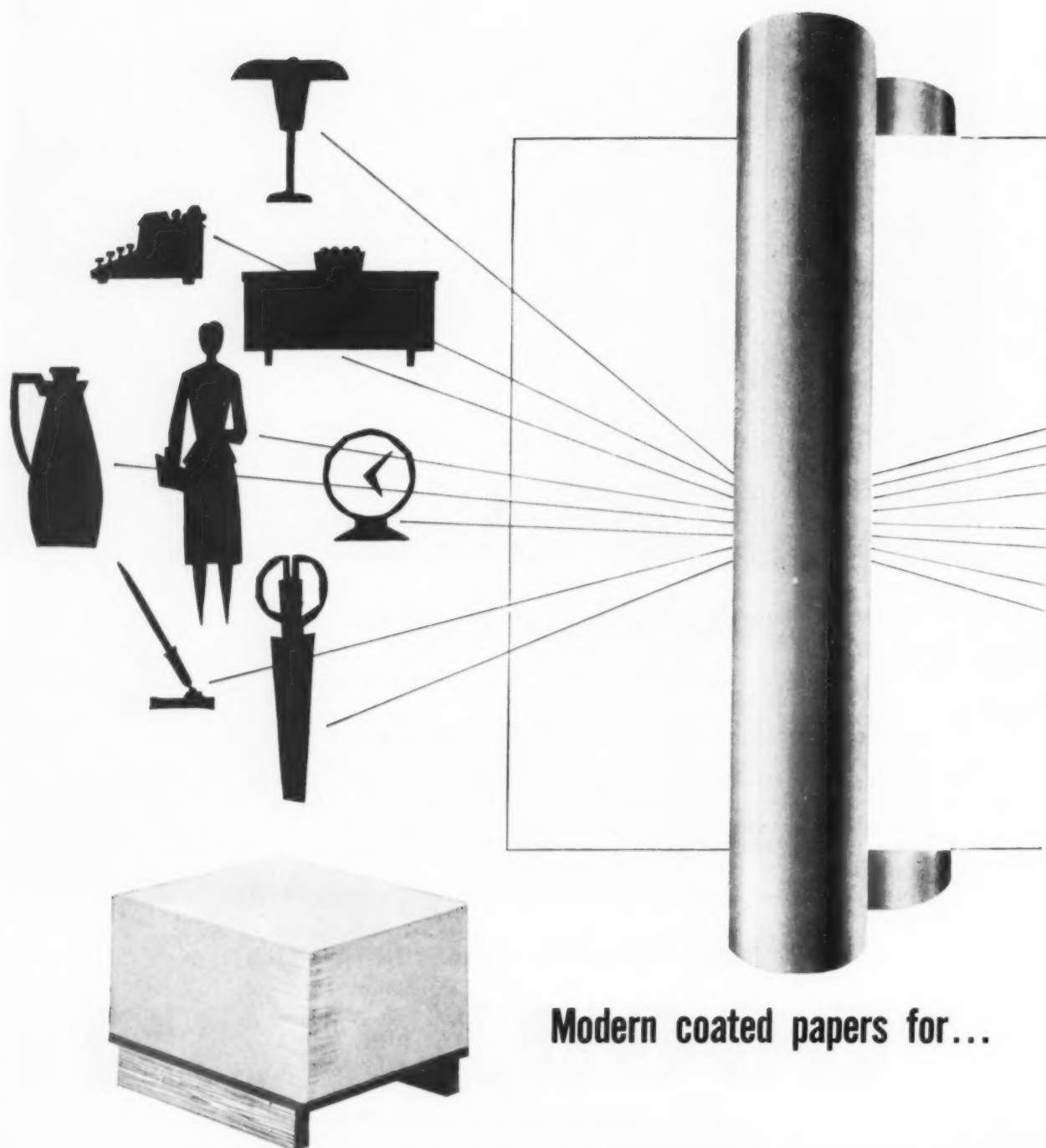
THE GREATEST NAME IN RUBBER

# GOOD YEAR

**PRINTERS SUPPLIES**

We think you'll like **THE GOODYEAR TELEVISION PLAYHOUSE**—every other Sunday—NBC TV Network

Everything comes to *life* on



Modern coated papers for...

# Kimberly-Clark Lithofect Offset Enamel

For fine offset reproduction at a modest cost, be sure to try smooth, white Lithofect Offset Enamel. It's the modern paper that gives sharp, clear, lifelike impressions from new or old equipment—because it's *engineered* for today's new inks and lithographing techniques.

What's more, Lithofect's careful balance of dimensional

stability, strength and all-around uniformity assures you of maximum performance on the press—accurate multi-color register, too!

Ask your Kimberly-Clark distributor for samples of Lithofect or any of the other outstanding papers listed below. You'll find you do your best on Kimberly-Clark stock!



**Modern Lithography:** Prentice Offset Enamel, Lithofect Offset Enamel, Shorewood Coated Offset, Fontana Dull Coated Offset.

**Modern Letterpress:** Hifect Enamel, Crandon Enamel, Trufect Coated Book, Multifect Coated Book.

**Kimberly Clark**

COATED PRINTING PAPERS

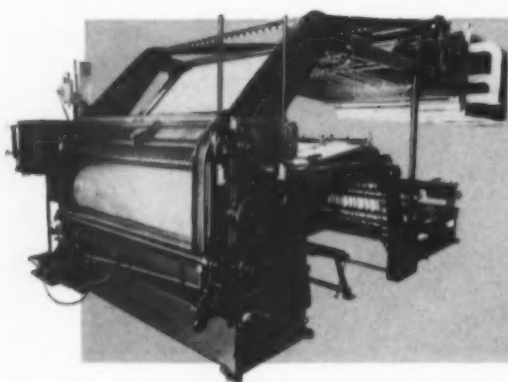
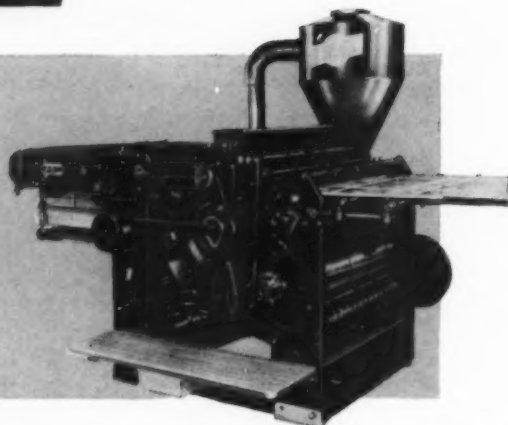


Kimberly-Clark Corporation • Neenah, Wisconsin

# CHRISTENSEN... for Pressroom Profits

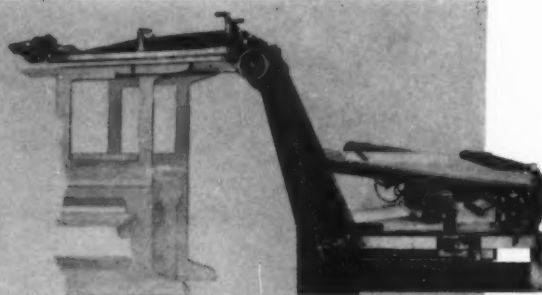


**BRONZING** Equipment will bring new jobs into your shop . . . and a Christensen High-Speed Bronzer attached to your press will mean increased profit with low operating costs. Matches the practical running speed of your press . . . exhaust-reclaimer keeps bronze out of the pressroom and in the machine.



**VARNISHING** of labels, magazine covers, circulars and gift wrappings enhances both product appearance and profits. The Christensen Varnishing Machine operates at almost twice the speed of any other present varnisher. Dual-level oven decreases floor space required. The Christensen will handle paper or board in widths up to 78 inches.

**STREAM FEEDING** with the Christensen Continuous Feeder means no stopping of the press . . . more printed sheets per hour. Improved register because sheets arrive at register position at one-sixth the speed of sheet-by-sheet feeders. Floor loading reduces operator fatigue, reduces loading time, eliminates stairs and platforms.



ILLUSTRATED CIRCULARS ARE AVAILABLE  
FOR ANY OF THE ABOVE MACHINES ➔

## DEXTER FOLDER COMPANY

General Sales Office

330 West 42nd Street New York 36, N. Y.





# WE TAILOR... to YOUR NEEDS

The services of the N.A.P.L. are cut to your pattern. If you operate a small single color press or a battery of multi-colors, the N.A.P.L. has a service to help you solve your problems.

Here are the services that can be adapted to your needs.

**Budgeted hourly rates.** To get top efficiency in figuring your costs, you need the kind of cost information supplied by N.A.P.L.

**Cost Control System.** You will enhance your opportunity to get profitable work if you really know your costs.

**Labor Relations.** What affects other litho plants regarding hours and wages will no doubt affect you, too. N.A.P.L. keeps you constantly informed on all phases of labor relations.

**Trade Customs.** When you are fully aware of your rights and those of your customers you can maintain better relations and avoid costly misunderstandings.

Find out how you can profit by membership in the N.A.P.L. Use coupon below.



NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS  
317 West 45th Street, New York 36, N. Y.

1954

We hereby make application for enrollment as an Active (Associate) Member in the National Association of Photo-Lithographers, and if elected, agree to abide by its by-laws and support its objects and interest as far as our time and ability will permit.

We enclose herewith \$..... as our first year's dues.

ANNUAL DUES FOR THE PRESS EQUIPMENT IN OUR PLANT IS AS FOLLOWS:

No. of Presses	ACTIVE MEMBERS (Those who operate equipment)		
	Presses smaller than 17"x22" (Minimum Dues \$37.50 per year).....	\$20.00 per press per year	\$
	Presses 17"x22" to 22"x28".....	\$28.00 per press per year	\$
	Presses larger than 22"x28" up to and including 35"x45".....	\$37.00 per press per year	\$
	Presses larger than 35"x45".....	\$47.00 per press per year	\$
	MINIMUM DUES, \$37.50 per year. Maximum Dues, \$450.00 per year.		
	ASSOCIATE MEMBERS		\$
	Equipment and Supply Dealers and Manufacturers, \$125.00 per year		\$
	Total Annual Dues		

Firm .....

City, Zone and State .....

Address .....

No., Street or Avenue .....

Phone .....

Signed .....

NATIONAL ASSOCIATION OF PHOTO-LITHOGRAPHERS

317 WEST 45th STREET — NEW YORK 36, N.Y.



*wash-up  
in  
**ONE STEP***

*with  
little  
benjy  
solvent*

Now — press wash-ups with a solvent that does its work in only one step. LITTLE BENJY helps you increase overall shop production . . . a complete solvent in itself — no preliminary or follow-up steps necessary. Just apply LITTLE BENJY as it comes in the can and presto — wash-up time is slashed — valuable production time is increased!

LITTLE BENJY restores tack when smooth, glazed rollers do not transfer ink properly. LITTLE BENJY removes glaze and restores the life of rollers. Never before has so little done so much to improve printing quality.

#### **SAVE TIME**

LITTLE BENJY does a thorough job quickly — average wash-up takes 3 to 10 minutes. Reduce wash-up time and free your press-room for more productive work.

#### **SAVE MONEY**

A can of one-step LITTLE BENJY outlasts 2 or 3 cans of ordinary two and three step solvents.

For a quality solvent, try **LITTLE BENJY:**

• Works rapidly and efficiently on all surfaces • High flash point — absence of toxic fumes — make Little Benjy a safe solvent • Does not harm rollers, blankets, or plate coatings • Simple and easy to use.

In these convenient sizes: gallon cans,  
5 gallon cans, 55 gallon drums.

On hand at the nearest Pitman office.

## **HAROLD M. PITMAN COMPANY**

Chicago 50, Illinois — 51st Avenue and 33rd Street  
North Bergen, New Jersey — 1110 13th Street  
Cleveland 11, Ohio — 3501 W. 140th Street  
New York 36, New York — 230 West 41st Street  
Boston 10, Massachusetts — 266 Summer Street

The Pitman Sales Co.

# CHEMCO'S POWERLITH...

THE FILM  
FOR TODAY'S  
LITHOGRAPHY



POWERLITH

OFFERS

THESE

COMBINED

ADVANTAGES

1. **INCREASED SPEED**—A 20% faster exposing orthochromatic litho film than any other currently available. Substantially reduces exposure time under all operating conditions.
2. **COMPLETE DEVELOPMENT LATITUDE**—Requires no change in development procedure.
3. **IMPROVED TONAL GRADATION**—Better balance between highlight, middle tone, and shadow halftone sensitivity produces a longer scale negative. True shadow detail results from 50% less flashing. In some cases, the need for flashing is completely eliminated.
4. **HARD DOT CHARACTERISTICS**—To meet all dot etching requirements.
5. **GREATER DENSITY AND CONTRAST**—Produces crisper line work and halftone dots. Reduces opaquing time substantially.

Available in regular or thin base, in both sheet and roll form. Packaged in light trap boxes, and priced no higher than other litho films.

Ask to have a Chemco representative demonstrate the outstanding Powerlith film in your shop...without obligation. Write your nearest Chemco branch office today, or direct to—



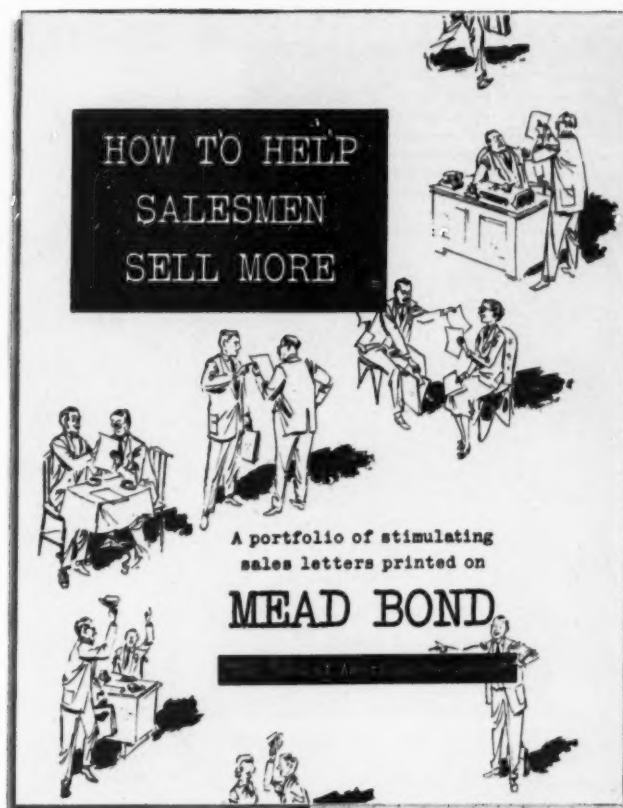
chemco

PHOTOPRODUCTS COMPANY, INC.

GLEN COVE, N. Y.

NEW YORK • CHICAGO • DETROIT  
BOSTON • NEW ORLEANS • ATLANTA • DALLAS





*This advertisement  
is being seen by your  
customers in Printers' Ink  
and in Reporter of  
Direct Mail Advertising  
M.P.*

## *Can you use some fresh selling ideas?*

If you're a sales-minded executive who is too busy to write sales letters, send for Mead's brand-new portfolio.

The portfolio contains a series of provocative, stimulating selling ideas. All of them are yours to use. Paraphrase them as you see fit, send them out over your signature, and we'll warrant your salesmen will respond hearteningly—and thank you for it.

In the same portfolio, Mead presents 12 fresh letterhead designs. With your printer, you can work out countless variations of any one of them until you

hit on a personality for your firm, and a face-lift for your business stationery.

These letters are printed on crisp Mead Bond—watermarked for your protection. We think the visual snap and clarity of the printing job speak volumes for the paper, its quality, its versatility. Write us today on your business stationery for this exciting new portfolio. Use the letters, and while you're at it, have them printed on Mead Bond—"The Bond of American Business."

### **THE MEAD CORPORATION**

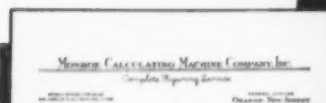
*"Paper Makers to America"*

Sales Offices: The Mead Sales Company, 118 W. First Street, Dayton 2  
New York, Chicago, Boston, Philadelphia, Atlanta



Prominent Users of Strathmore Letterhead Papers: No. 113 of a Series

*One of the latest Monroe  
Adding-Calculators,  
capable of split-second  
computations automatically,  
without chance of error.*



*no margin for error*  
**with QUALITY!**

It is safe to say that the huge financial enterprises which are so necessary to our modern world could not have developed so readily without the mechanical calculating machine. In this respect, the contribution of the Monroe Calculating Machine Company to the world of business has been considerable. Monroe adding, calculating and accounting machines help turn the wheels of commerce all over the world with dependable efficiency.

The Monroe Calculating Machine Company prides itself both on the uniform precision of its many products and on the quality which invariably distinguishes the operation of its entire organization. Typical of this is the Monroe letterhead... distinctive and expressive on a Strathmore Letterhead Paper.

The fact that so many prominent firms insist on a Strathmore paper when they plan a letterhead is a clear indication of its quality. To observe an even more vivid demonstration of this innate quality, have your supplier show you samples of your letterhead design on a Strathmore paper. You will see why you, too, should count on Strathmore's expressive quality.

**STRATHMORE LETTERHEAD PAPERS:** *Strathmore Parchment, Strathmore Script, Thistlemark Bond, Alexandra Brilliant, Bay Path Bond, Strathmore Writing, Strathmore Bond. Envelopes to match converted by the Old Colony Envelope Company, Westfield, Mass.*  
**NEW STRATHMORE THIN PAPERS:** *Strathmore Parchment Onion Skin, Strathmore Bond Onion Skin, Strathmore Bond Air Mail, Strathmore Bond Transmaster.*

# STRATHMORE

MAKERS OF FINE PAPERS

Strathmore Paper Company, West Springfield, Massachusetts

## Strathmore ADVERTISEMENTS

in national magazines tell your customers about the letterheads of famous American companies on Strathmore papers. This makes it easier for you to sell these papers, which you know will produce quality results.

★ ★ ★

*This series appears in:*



**TIME**



**NEWSWEEK**



**BUSINESS WEEK**



**PRINTERS' INK**



**SALES MANAGEMENT**



**PURCHASING**



**ADVERTISING  
REQUIREMENTS**

# How Ansco Reprolith Ortho Type B Film will improve your operation



## *Saves time*

The high speed of Reprolith Ortho Type B Film permits shorter exposures in the camera or in the contact room.



## *Saves effort*

Full orthochromatic sensitivity permits your operator to improve copy rendition through the use of filters. Thus handwork on negatives is reduced.

This fine Ansco emulsion also offers such important advantages as wide exposure-development latitude, steep gradation and excellent dot-etching qualities.

Every step of the way, Ansco Reprolith Ortho Type B Film works to give you a more efficient shop.

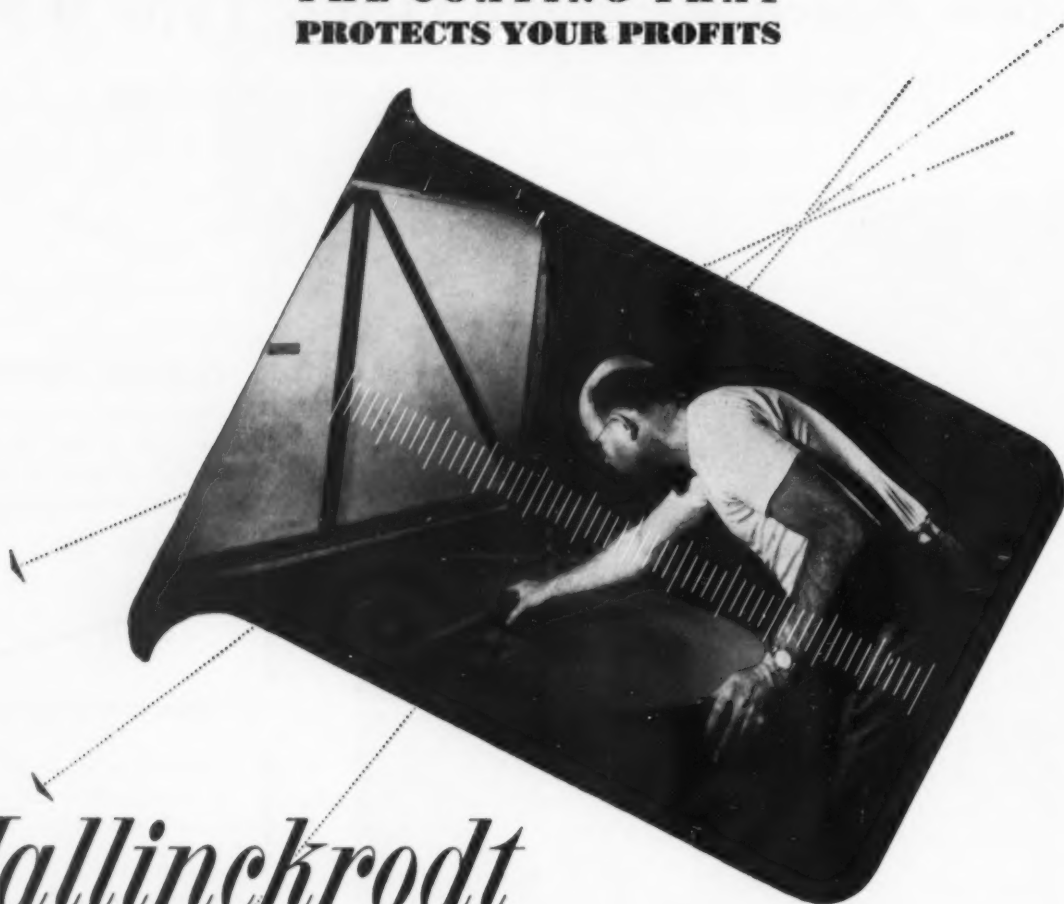
Call your Ansco representative for a demonstration.

## *Ansco*

Binghamton, New York  
A Division of General Aniline  
& Film Corporation.  
*"From Research to Reality."*

## IN THE GRAPHIC FIELD IT'S ANSCO

**THE COATING THAT  
PROTECTS YOUR PROFITS**



*Mallinckrodt*

**ALBUMEN EGG SCALES  
AMMONIUM DICHROMATE**

Low material cost. Smooth, tough coatings for long runs . . . fewer deep-etch plates. Fewer make-overs . . . time saved. All these advantages add up to profit-protection for you.

**Dichromate Photo**—created for lithography by a special process—assures clean, sharp prints on your plates. So free of sediment it remains crystal-clear after standing several days.

**Albumen**—carefully selected to meet plate coating requirements. Nearly 100% soluble (you can depend on solutions of uniform density with your formula). Its purity and uniformity insures pinhole-free plates and consistent performance.

**ORDER A TRIAL SUPPLY TODAY.**

*Let them prove their advantages in your shop!*

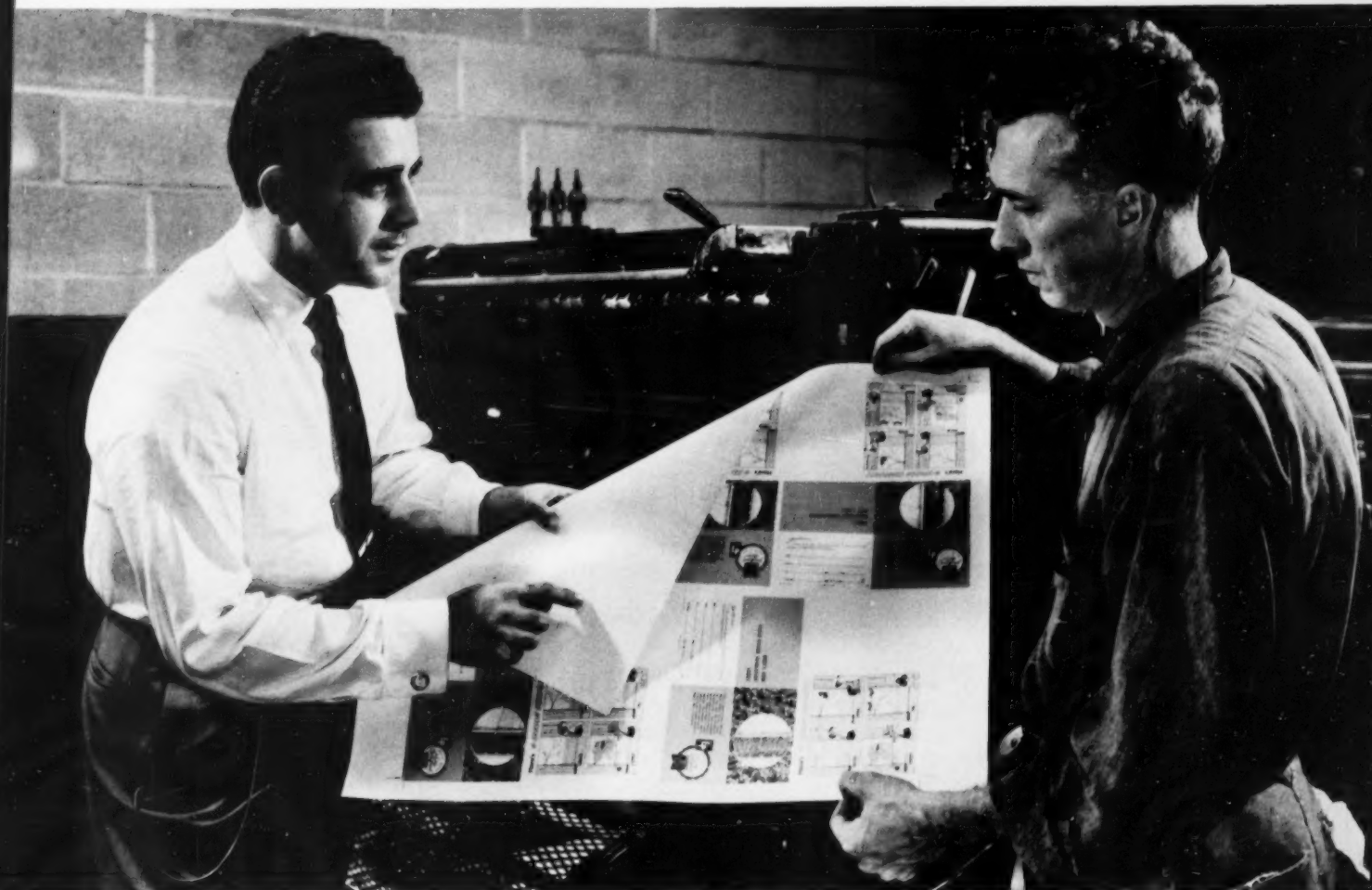
*Mallinckrodt*

**MALLINCKRODT CHEMICAL WORKS**

Mallinckrodt St., St. Louis 7, Mo. 72 Gold St., New York 8, N. Y.  
CHICAGO • CINCINNATI • CLEVELAND • LOS ANGELES • MONTREAL • PHILADELPHIA • SAN FRANCISCO  
Manufacturers of Medicinal, Photographic, Analytical and Industrial Fine Chemicals



# WHAT TO DO ABOUT SHOW-THROUGH



-in one easy lesson

(please turn the page)

the answer is:  
SPECIFY  
THE PAPER  
WITH MAXIMUM  
OPACITY ...

BECKETT *Brilliant* OPAQUE

This insert is a good demonstration. Note that show-through is held to a bare minimum, so that white areas in the layout are unmarred in appearance.

In printability, as well as in opacity, this popular super-white sheet is unexcelled. Photographs, color illustrations and type reproduce with remarkable fidelity and sharpness.

Complete catalogue of cover and book paper weights furnished on request.

THE BECKETT PAPER COMPANY

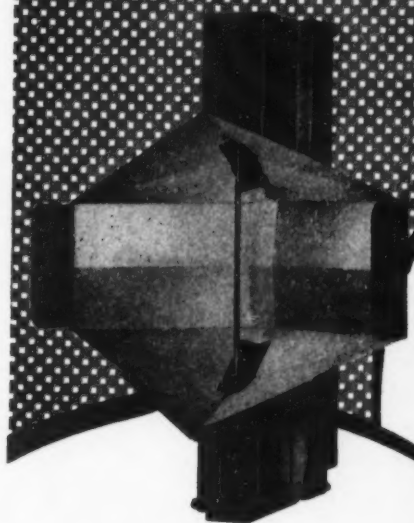
*Makers of Good Paper in Hamilton, Ohio, Since 1848*



There Really IS a Difference  
in arc lamps . . . a world of difference

# Strong GRAFARC

Fully Automatic, High Intensity Arc Lamps



**SEE** the amazing new, low-cost Challenger Camera Arc Lamp. A vertical trim lamp which burns at 75 amperes and 23 volts at the arc. The transformer is of the isolated secondary type, providing complete protection from shock to the operator. Light in weight. Readily mounted on the lamp support arms of any camera.

When you have Strong lamps you can rest assured that you are not isolated from quick emergency service by competent service men. They're everywhere.

... alone give you all these features, advantages, values:

- Models for all photo-mechanical reproduction processes—for saving money on every job while making it easier.
- Cut plate-making exposure time in half. You'll be amazed at the time these lamps will save—that's why they quickly pay for themselves and then go on to earn big dividends for you.
- Uniform coverage of large areas.
- Constant color temperatures.
- Eliminate illumination variables in accurate control of densities, regardless of line voltage variations.
- Sharper reproduction.
- Eliminate dot undercutting.
- Power to punch through dense Kodachromes.

We're sure you'll junk your present lamps when you see the Grafarc! Impressive comparative tests best demonstrate their superiority. Compare all makes. After all arguments are exhausted and performance becomes the deciding factor, we'll bet you buy Grafarc. Their performance spoils you for any other lamps; own them once and you'll never buy another make. That's why thousands have switched to Grafars. They know that for many years of **DEPENDABLE** service nothing takes their place. You simply can't do better!

You'll be convinced if you ask others what they think of Strong lamps. Take it from those who know. There are enthusiastic owners everywhere. Or, better yet, arrange for a demonstration by your dealer.

## THE STRONG ELECTRIC CORP.

17 CITY PARK AVENUE

TOLEDO 2, OHIO

Please send free literature on Strong Grafarc Lamps.

NAME

FIRM

STREET

CITY & STATE

NAME OF SUPPLIER

## Useful Tools

**T**he photograph on the right might be called a picture within a picture. In its composition are some of the typical tools and elements which the photographer, the plate-maker, and the printer have employed to achieve the reproduction itself.

Pictures are tools that shape good will and acceptance for the advertised product. When a pictorial idea stops the eye, it starts the imagination. People read an advertising message because they actually wish to read it. Printed advertising makes an impression because it appeals to a voluntary audience.

The artistry and craftsmanship that go into graphic salesmanship are vital factors in winning voluntary interest. Not least among these factors is fine paper. Westvaco fine papers help to present creative ideas with the full impact of visual effectiveness. The Westvaco line is produced by papermaking craftsmen to match the skills of printing craftsmen. That is why printers and advertisers can depend upon Westvaco fine papers for distinctive graphic results.

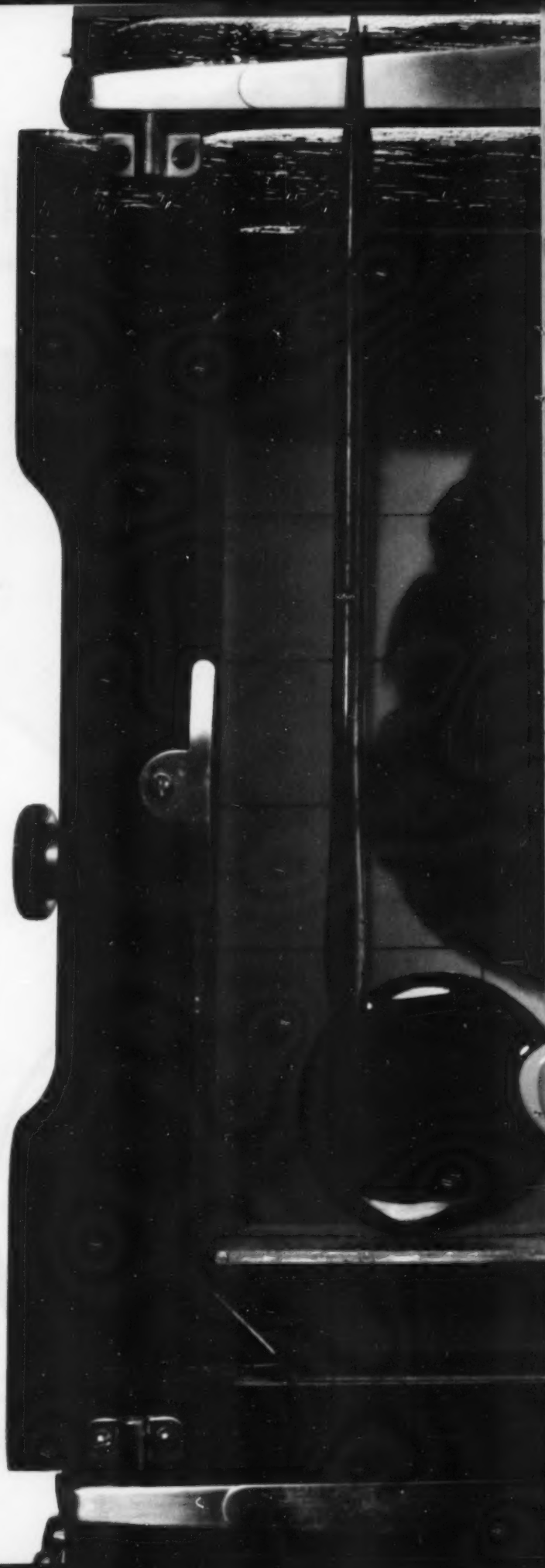
New developments in the field of the graphic arts are featured in every issue of Westvaco Inspirations for Printers. Number 198 of this free publication supplies scads of ideas for using creative design with fine papers. Be sure to get this issue. Phone or write to your nearest Westvaco distributor or to any of the Company addresses listed on this page.

### Cover Photographer

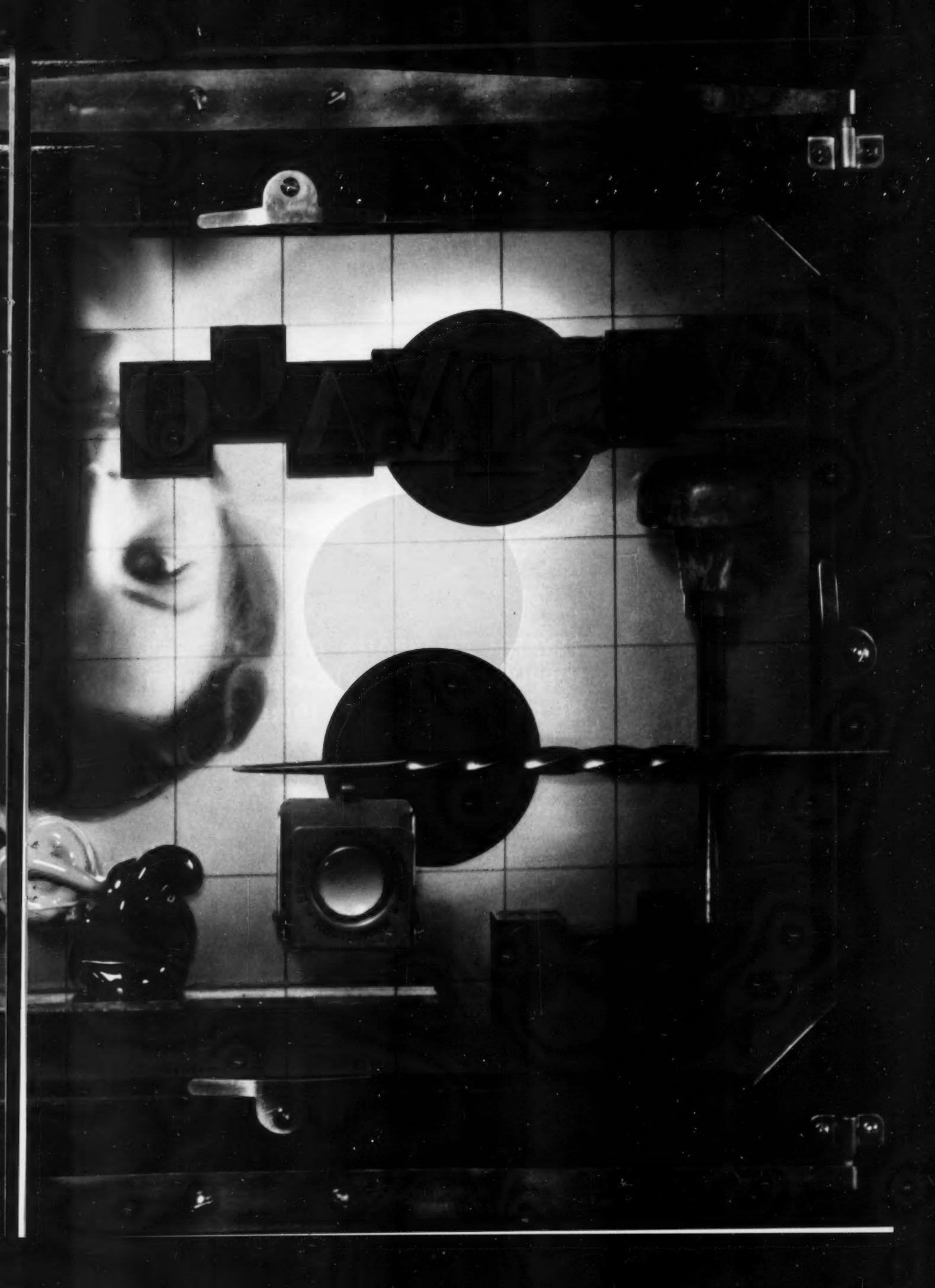
Ben Somoroff, American photographer noted for his fine still-life and fashion pictures, was born in Philadelphia in 1915. He attended the Pennsylvania Museum School of Industrial Art. His work has been shown in the leading museums and important photographic exhibits. It appears regularly in distinctive advertisements and in the editorial pages of *Mademoiselle* and other national magazines.

## West Virginia Pulp and Paper Company

230 Park Avenue, New York 17  
35 East Wacker Drive, Chicago 1  
503 Market Street, San Francisco 5









QUALITY FOR THE TRADE



GEVAERT CELEBRATES ITS 60TH YEAR  
SUPPLYING THE WORLD-WIDE MARKET  
OF GRAPHIC ARTS REQUIREMENTS.

#### PANCHROMATIC PLATES

Rapid Process Extra Panchro  
P2 Pan - Clear and Matt

#### NON-PANCHROMATIC VARIETIES

Lithaline Ortho Plates Standard, 130 and 190 Glass  
Lithaline Ortho Film 2 005 Safety Base  
Lithaline Ortho Film 3 003 Safety Base  
Lithaline Ortho Stripping Film 2 005 Safety Base  
Lithaline Ortho T Paper Translucent Base  
Process Extra Ortho Plates Standard, 130 Glass  
Process Extra Ortho Film 007 Safety Base  
Normal Film 007 Safety Base

#### THIN BASE FILM FOR MASKING

Contrast 3 Commercial Type Emulsion  
Dipos 3 Dia Positive Film Contact and Rapid  
Lithaline Ortho 3

#### PIGMENT PAPER FOR PHOTOGRAVURE AND SILK SCREEN

N Normal  
V Vigorous

For additional information covering these products consult  
your Gevaert dealer or write to the nearest Gevaert branch.

#### THE GEVAERT COMPANY OF AMERICA, INC.

321 WEST 64TH ST.  
NEW YORK 19, N. Y.

150 N. WACKER DR.  
CHICAGO 6, ILLINOIS

6370 SANTA MONICA BLVD.  
LOS ANGELES 38, CALIFORNIA



# NEKOOSA OFFSET

has the surface you need

*for fine color lithography*



We check Nekoosa Offset's surface (above) and, of course, we test dimensional stability, bulk, brightness and opacity.

Look at the surface of an offset paper if you are looking for perfection in performance. *We do.* We look at the surface while Nekoosa Offset is being made—and we check again before Nekoosa Offset goes out—to make sure that all of your fine color lithography will reproduce in crisp, sparkling, life-like tones. Basis 50, 60, 70, 80 and 100. Other weights on special order. Ask your Nekoosa paper merchant to show you samples.

by the makers of

**BOND**  
*Nekoosa*  
MADE IN U.S.A.



Established in 1861

The newest of Fitchburg's fine papers for lithographing is **FITCHBURG VELLUM**. All the characteristics that make paper outstanding are present in this brilliant white sheet. It offers unexcelled printability and trouble-free press performance. Quality-wise it is among the country's top sheets and value-wise it tops all others.

Write to the mill for complete information, sample sheets and reference to local distributors.

## **Fitchburg Paper Company**

MILLS AND MAIN OFFICE: FITCHBURG, MASS. • NEW YORK OFFICE: 250 PARK AVE., N. Y., 17

Office for Distributor Sales, 3rd National Bank Bldg., Springfield, Mass.



# new...OZALITH

## paper offset plates—

The first sensitized  
positive paper plate...  
from original to running press  
in less than 90 seconds...



1—Lay translucent copy over Ozalith, and expose in any Ozalid machine or similar light medium.



2—Swab exposed plate with developing fluid and fixer, place on press cylinder—and you're ready to run.

Ozalith...the new quick way to make offset plates will save you time and money over conventional photographic methods. Think of it—no camera-work, no negatives! You go *directly* from translucent original to running press—in less than 90 seconds!

Just place the original on the Ozalith plate, and expose in an Ozalid machine—Bambino to Printmaster—or any similar light medium.

Swab the exposed plate with developing fluid and fixer, place on the press cylinder—and it's ready to run.

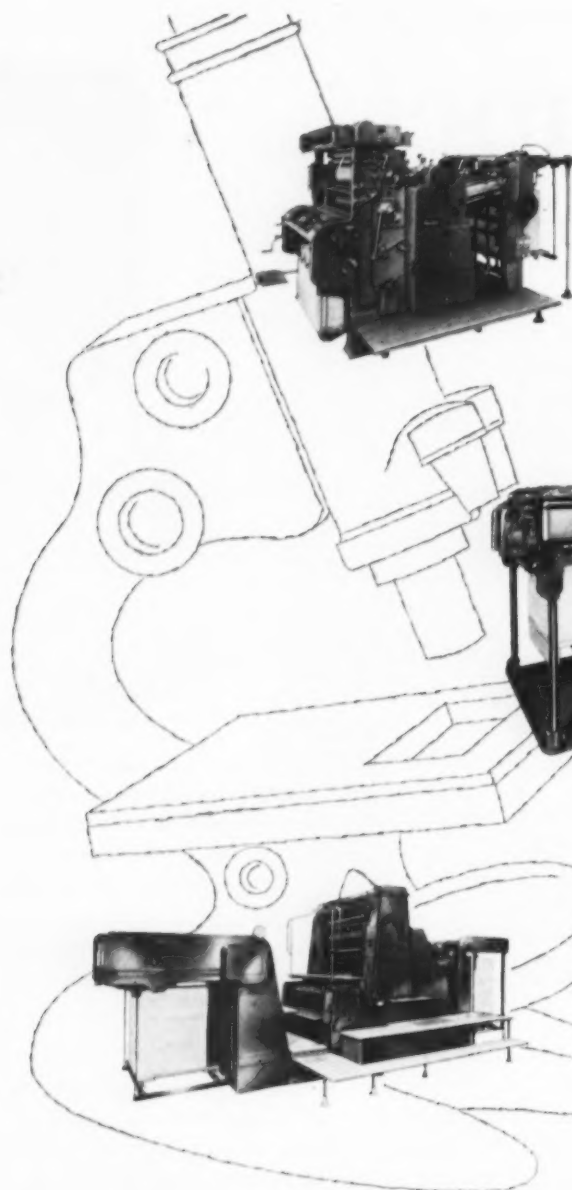
Ozalith saves the cost of film and photography, eliminates the need for darkroom and messy developing...and Ozalith paper plates are so inexpensive that they needn't be filed. You can make extra plates when needed, quickly and inexpensively, from your original.

For longer runs, and absolute dimensional stability, Ozalith plates are also available on aluminum.

For a demonstration of Ozalith plates in your own office, call the nearest Ozalid distributor (*see phone book*). Or write for information to 602 Ozaway, Johnson City, New York.

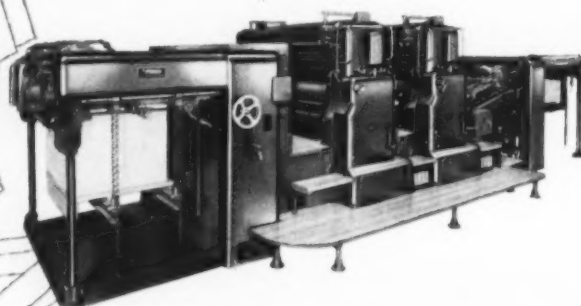
OZALID—A division of General Aniline & Film Corporation...*From Research to Reality.*  
In Canada, Hughes Owens Company, Ltd., Montreal.

# OZALITH



*Investigate  
before you  
invest!*

*Investigate Miehle's  
Complete Line of  
Offset Presses . . .*



*Before you Invest  
Investigate Miehle*

- Improved Stream Feeding
- Swing Gripper Transfer
- True Rolling
- Superior Inking and Dampening
- Automatic Lubrication
- Positive Sheet Control from Feeder through Delivery

On any basis of comparison Miehle Offsets are the soundest investment you can make—an investment that will pay dividends year after year after year. For full information on Miehle Offsets write The Miehle Printing Press & Manufacturing Company, Chicago 8, Illinois

PRESS	SHEET SIZE	SPEEDS UP TO
29 Single Color	23 x 29	7000
36 Single Color	23 x 36	6500
41 Single Color	30 x 42	6800
41 Two Color	30 x 39	6800
49 Single Color	36 x 49½	6500
49 Two Color	36 x 49½	6500
61 One to Five Color*	42 x 58	6500
76 One to Five Color*	52 x 76	6000

\* The Miehle 61 and 76 Offsets are built on the Unit Construction principle and are available as one, two, three, four, and five color presses.

**The Miehle**

*Leader  
among the world's  
manufacturers of  
fine printing equipment.*



*Merry Christmas Happy New Year*

from all of us at

**RAPID ROLLER COMPANY**

**CHICAGO AND NEWARK**

EASTERN OFFICE: 800 McCARTER HIGHWAY, NEWARK, N. J.

**Industry reports to the people**



Today the modern company's annual report reflects personality, integrity and stature in the business world. For this reason, many of the most smartly designed and carefully executed reports are reproduced on Oxford Papers. In promoting a company's prestige, as in promoting its products, Oxford Papers play a vital role year after year. Ask your Oxford Merchant to show you successful examples.

★ ★ ★

**TWO VALUABLE AIDS.** (1) The new **OXFORD PAPER SELECTOR CHART** is a time-saving master guide to the right grade for each purpose. (2) The new **OXFORD PAPER COST CALCULATOR** gives the exact cost per 1000 sheets for all common weights and sizes. Ask your nearby Oxford Merchant or write us direct.

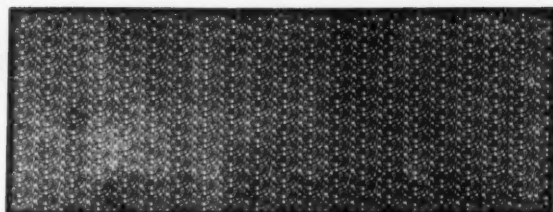
**Oxford Papers**  
*Help Build Sales*

**OXFORD PAPER COMPANY**, 230 Park Avenue, New York 17, N. Y. • **OXFORD MIAMI PAPER COMPANY**, 35 East Wacker Drive, Chicago 1, Ill.  
*Mills at Rumford, Maine and West Carrollton, Ohio*



# WHY **Siebold** SAFETY INKS MAKE CHECK PRINTING DOUBLY PROFITABLE

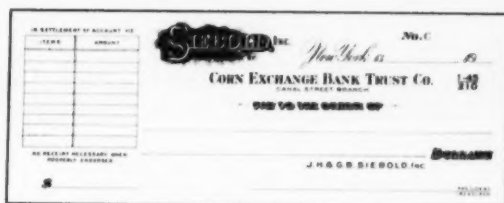
1.



## YOU MAKE AN EXTRA PROFIT

—by printing the specially  
designed SAFETY PAPER  
that makes checks  
TAMPER-PROOF.

2.



## YOU MAKE YOUR REGULAR PROFIT on printing the face of the check.

What's more, when a Lithographer or Printer manufactures *his own safety paper* by printing plain stock with Siebold Safety Inks, he can offer his customers CHECK PAPER with distinctive individual pantograph designs—which offer an added protection against alteration by chemicals or erasure. Here is a sales tool that can help you win new customers and keep old ones happy.

**EASY TO HANDLE**—Siebold Safety Inks can be mixed with any litho varnish from No. 4 to No. 5. Never add dryers or boiled oil, as boiled oil is a drying oil.

**COLOR FLEXIBILITY**—If color is too strong it can be reduced by using Siebold's Sensitive White which is manufactured specially for this purpose.

**NO SPECIAL PLATES REQUIRED**—Use either albumen, deep etch or high etch plates, or electrotypes.

**NON-SENSITIVE TO WATER**—Siebold Safety Inks are sensitive to acid only. They can be run successfully from any type of lithographic plate or letterpress electrotypes.

**PRICES**—\$3.50 per single pound, \$3.00 per pound in lots of 5 pounds or over FOB New York. One pound will print 5 to 10 reams of paper. This is based on a 22 x 34 sheet, printed 24 up, according to pantographic design. We will be glad to send you our color book of printed samples of Safety Inks available in 19 colors. Send for it today.



"OVER  
A HALF CENTURY  
OF SERVICE"

MANUFACTURERS OF  
Electron-O-Plate  
MACHINES

MEMBER: Lithographic Technical Foundation—  
National Association of Printing-Ink Makers—  
National Printing-Ink Research Association—  
N. Y. Employing Printers Association.

J. H.  
&  
G. B.

# Siebold

INCORPORATED

MANUFACTURERS OF  
PRINTING, LITHOGRAPHIC

# INKS

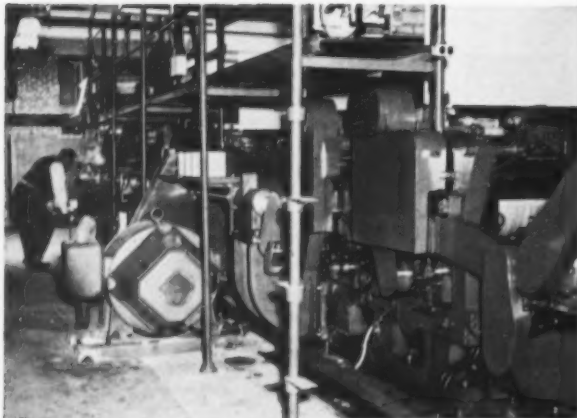
AND SUPPLIES

150 VARICK STREET • (Dept. C) • NEW YORK 13, N. Y.

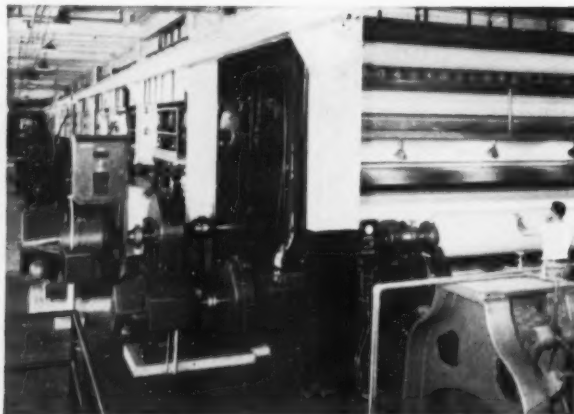
BUILT AND APPLIED BY RELIANCE

# THE Tools of Automation

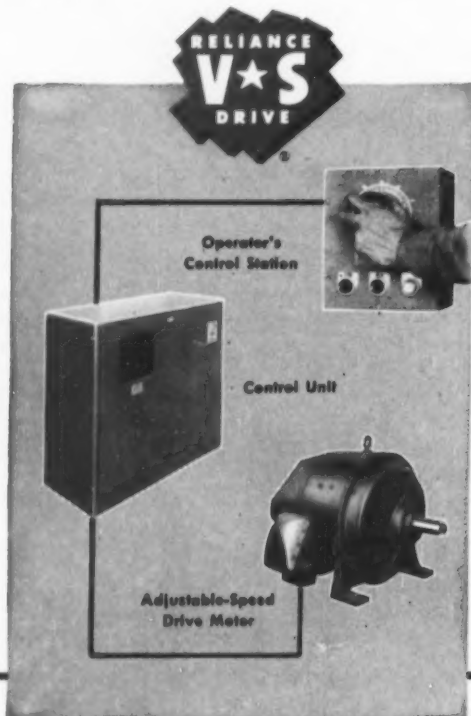
INCREASE PROFITS IN EVERY INDUSTRY



*Materials in web form—paper, metal foils, synthetic sheets—become useful as they are impregnated, combined with each other, printed, and made into packages. Reliance V\*S Drives power, synchronize and control all functions required for automatic operation.*



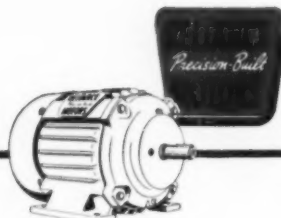
*On a high-speed newsprint machine, the Reliance V\*S Drive system provides unsurpassed accuracy and dependability, maintaining precise speed relationships and correct draw adjustments between all sections.*



Greater machinery output . . . improved production efficiency . . . both result in increased profits. And both result from using the Tools of Automation: Reliance electric motors, adjustable-speed drives, electronic controls, and applied engineering. They're setting new standards for low cost production in *every* industry.

These Tools of Automation can most efficiently lower your costs, because they're designed and applied to *your* specific situation. Reliance Application Engineers are backed by nearly 50 years' experience in perfecting the drive systems that can help you attain the degree of automatic production you require. For further information, write for the new booklet, "The Tools of Automation".

A-1497-B



**RELIANCE** **ELECTRIC AND ENGINEERING CO.**

Sales Representatives in Principal Cities

• 1115 Ivanhoe Road, Cleveland 10, Ohio



The voice  
of color!

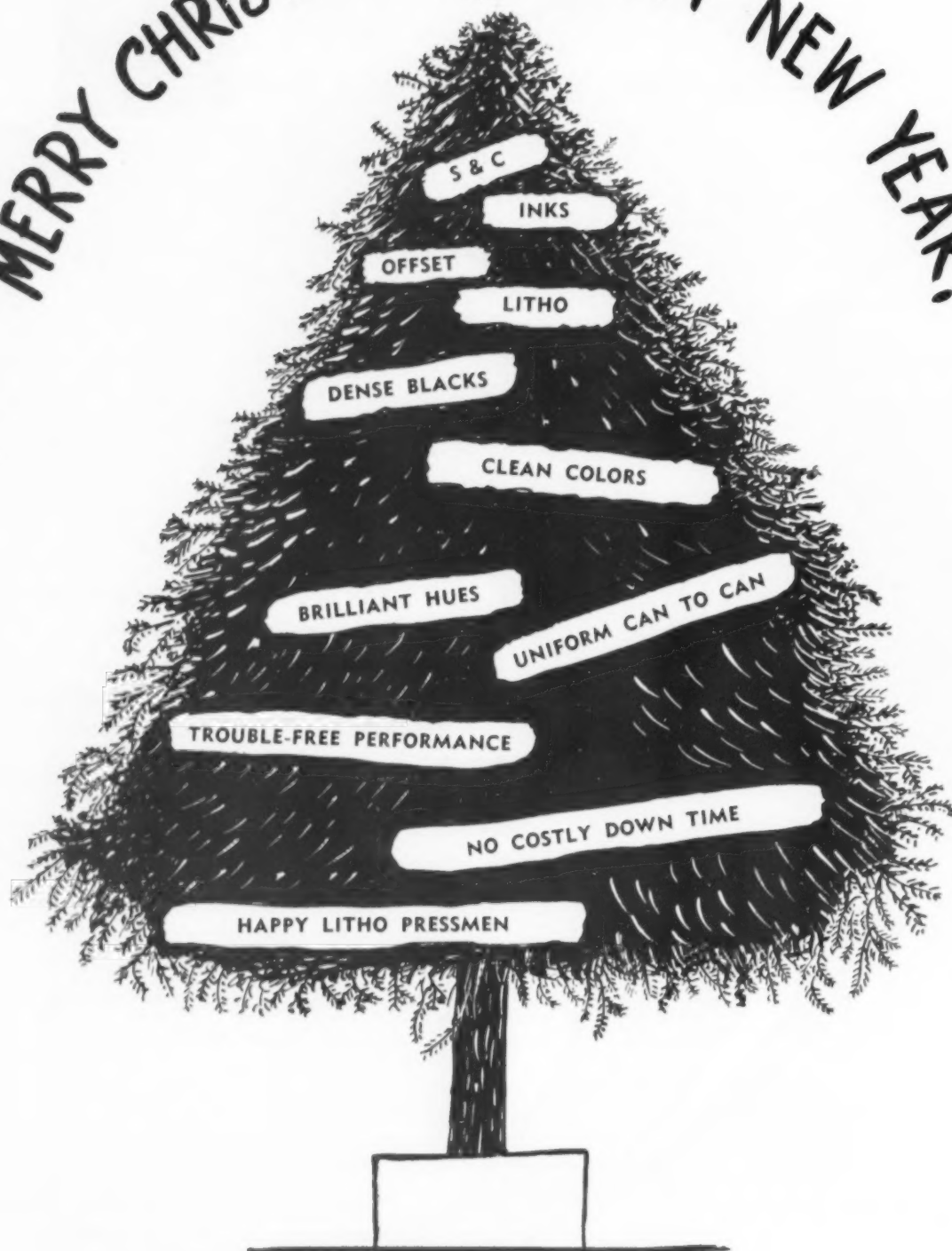
S&V color speaks louder than words.  
It's the quickest means of attracting  
attention . . . the truest way to  
depict a product . . . the surest means of making a  
lasting impression. That's why so many  
thousands of printers let S&V color  
speak for them. You, too, can depend on  
S&V for the finest in all types of  
printing inks—for the widest range  
of brilliant colors, and the best  
in personal service.

OVER 35 BRANCHES PROVIDING SERVICE  
FROM COAST TO COAST

**Sinclair and Valentine Co.**

Main office and factory: 645 West 29th St., New York 27, N. Y.

MERRY CHRISTMAS  HAPPY NEW YEAR!



**SINCLAIR & CARROLL Co., INC.**

NEW YORK

CHICAGO

SAN FRANCISCO



# Editorials

**I**N addition to all the worries that continually confront the litho industry leaders—keeping up with innovations in methods and materials, getting and keeping customers, quality control—they have the complex problem of assuring that enough workers are available and that enough are being trained for future needs.

There is strong evidence this month that the industry is failing on the last point. In fact, the manpower situation, which already is a serious problem in some areas, will get even worse in future months and years, according to present trends.

These trends were analyzed by the Union Employers Section of the Printing Industry of America. That Section's report was issued just as PIA met in Detroit for its annual convention, possibly to forestall any chance of overconfidence or smugness in an industry that has held up remarkably well in recent years.

Briefly, the situation, as described elsewhere in this issue, is this: journeymen in the printing industry—offset and letterpress—are on the average, 48 to 52 years of age. Hence, 30 percent of them will be leaving the industry in the next 10 years because of death, retirement, or other reasons. That fact is not particularly alarming in itself. If the industry were training one apprentice for every five journeymen presently employed, it could maintain the level of its work force.

But it isn't doing that. According to the PIA report, in fact, it's doing only half the job. This conclusion is unavoidable: The litho industry must double its training efforts to meet these manpower needs. That will mean additional expenditures in most cases, and a lot of long range planning. And

it will mean a few more headaches for the men who claim they've got enough already. But, if the litho industry is to expand, this increased training program must be started—and soon.

The lithographic industry is particularly well-armed for meeting the training problem—more so than are other branches of the graphic arts. With its complete training materials, prepared by the Lithographic Technical Foundation, our industry already has a major part of the problem licked.

One more point: the PIA report wasn't concerned with expansion in the printing industry, which is certain to continue. To assure this, then, industry leaders must set their sights even higher than PIA recommends.

**I**T is common knowledge, at least in the trade, that lithography is big business and getting bigger all the time. But backing up these statements with figures is another story. For the most part, they just aren't available. That's why it was especially interesting to hear Ren Perry, vice president of Harris-Seybold Co., present an excellent set of statistics at the recent meeting of the New York Litho Club.

Among his figures, which were reported in the November ML, were these: annual volume of litho business in the U. S. is \$1 billion and is expected to increase to \$1½ billion by 1960; business in New York metropolitan area totals \$250,000,000 a year, predicted to go up to \$350,000,000 by 1960; 50% of U. S. production of books by offset is done in New York City.

Mr. Perry cited other figures and showed a movie

*(Continued on Page 109)*

On closed channel:

# LTF Presents TV Forum

*By H. H. Slawson*

Chicago Correspondent

**C**OLOR television was the lure that drew more than 800 lithographers to Chicago, Nov. 5 and 6, for the \$20,000 technical forum sponsored by the Graphic Arts Association of Illinois and conducted by the Lithographic Technical Foundation.

Originally the forum had been planned to acquaint members of the GAAI in Chicago and downstate Illinois with the research done by LTF to advance the technique of lithographic reproduction processes. As word got around advance requests for reservations mounted and the forum soon took on an international aspect.

Represented in the audience at the two-day meeting were lithographers from coast to coast, along with others from Canada, Australia, Holland and other countries. One lithographer started by air from Bombay, India, but was grounded en route and was forced to miss the Chicago meeting.

All program features, including live demonstrations of the latest LTF research work, were presented through the medium of color TV. Radio Corp. of America, which handled the tele-

vising, stated that it was the first closed circuit industrial TV program in color it has ever projected.

#### **Equipment Used**

From the LTF Glessner House laboratories all shop equipment required in the demonstrations, except a press, was moved to the Morrison Hotel. There, in a parlor on the second floor, RCA had worked for a week to set up a small edition of a Hollywood color TV studio, complete with color cameras and kleig lights.

As the cameras ground away with lenses turned on the various LTF laboratory speakers, the image and sound were fed to a mobile telecasting station in a truck in front of the hotel. There, instead of releasing the telecast through the air, as for an ordinary commercial show, it was piped by closed circuit wire back to the meeting room, one floor below the studio, where the pictures were viewed by the audience through 30 receiving sets lined up along two walls of the room.

Wm. H. Sleepack, Jr., president of the Graphic Arts Association, and head of Sleepack-Helman Printing

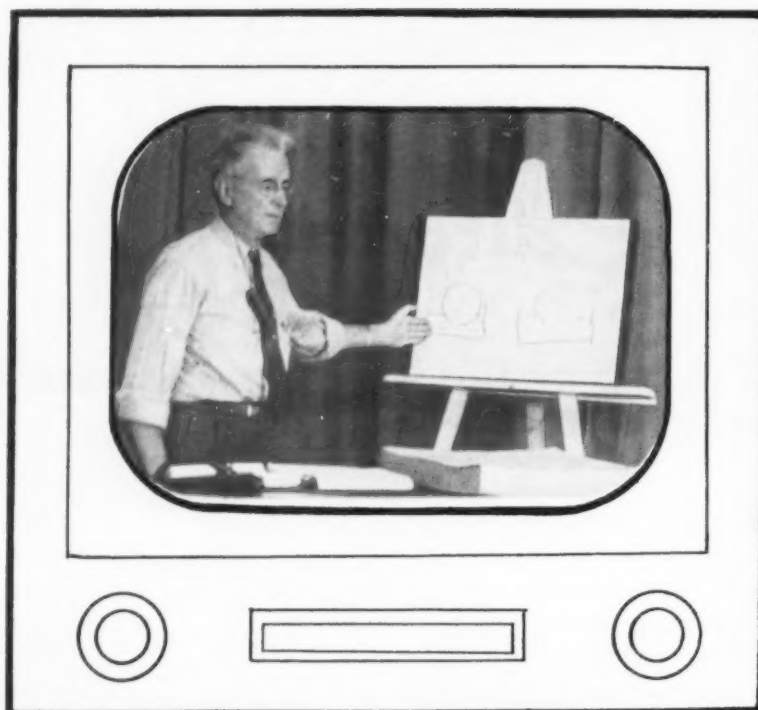
Co. and Sleepack Litho Co., welcomed the crowd as the program got underway Friday afternoon. Seven staff men from the Glessner House laboratories appeared on the meeting room screens to discuss various phases of lithographic processes, including new methods and mechanical devices developed at the laboratory.

These "actors" (without TV make-up) were Robert F. Reed, Michael H. Bruno, Jack W. White, George W. Jorgenson, Edward J. Martin, James K. Martin and Gordon C. Wheeler.

First of the demonstrations, on "Paper and its printing properties," was made by Prof. Reed, authority on the subject, who covered the manufacture and characteristics of coated and uncoated lithographing paper, explained the reasons for trouble due to paper and showed the use of the paper hygroscope, the K & N ink absorbence test and tests for felt and wire side.

#### **Surface Platemaking**

"Surface Platemaking" was handled by Mr. Bruno and Edward Martin, who demonstrated before the cameras latest litho techniques, and discussed



Robert F. Reed of LTF staff demonstrates paper properties before the color TV camera for some 800 Chicago viewers.

reasons for trouble caused by incorrect processing.

Following this the men demonstrated the preparation of the new ungrained deep etch plate and the changes LTF recommends in the regular deep etch platemaking method.

Final speaker of the first afternoon's session was George Jorgenson, who demonstrated "Contact Printing Lamps and Vignettes," with explanation of how the new LTF lamp for contact printing works. He also showed how to use LTF's new method for making halftone vignettes with smooth tone gradations.

Dr. Reed opened the Saturday session with a discussion of "Paper and Ink Troubles." Then came Gordon Wheeler to demonstrate the new LTF pick tester and how its use helps to avoid trouble from paper picking on the press.

"Bi-metal Plates," was handled by Mr. Bruno and James Martin, who presented fundamental information and a demonstration of how to make the copper-aluminum plate, perfected by LTF.

"Instruments for control and

Top, (L-R) J. Louis Landenberger of Philadelphia, LTF president; Frank J. Bagamery, Graphic Arts Assn. of Ill., and Wade E. Griswold, Exec. Dir. LTF. Center: Some members of Ill. Assn. of Young Printing Execs. Below: Some of the 800 persons viewing color TV on 30 receiving sets.



standardization," the fourth Saturday morning topic, was presented by the hard-working Mr. Bruno and other laboratory staff members, who covered the array of devices available for quality production, with explanations of those devices developed by LTF, including the sensitivity guide, register rule, paper hygroscope, bench and press inkometers and pick tester.

#### **Wash-Up Methods**

Later in the day Mr. Bruno handled new press wash-up methods and the elimination of ink roller stripping. Following him Edward Martin demonstrated handling plates on the press, for which a color movie had been made in advance, because it was impossible to set up a press in the hotel studio.

Sources and types of technical information available to lithographers were explained by Jack White in his talk on "LTF's Educational Program." Mr. Bruno then peered into a crystal ball to outline research studies now underway that will have effects on lithographic methods and materials. Closing the two-day forum was a two-hour quiz session in which the LTF staff handled questions sent in by the audience.

Friday's long day and night session was interrupted by a program break for dinner in the Morrison's Terrace Casino, after which the capacity crowd returned to the East Ballroom for resumption of the forum discussions.

Departing from technical subjects, the evening speakers addressed themselves to the lithographing industry's customers, among them advertising agency representatives, who attended the session.

John Odell of RCA's graphic arts department's new products division, in explaining the "marriage" of color and electronics, pointed out the similarities between the TV camera and the process color separation camera. In developing the TV color camera, he said, electronic science has derived much assistance from the work done by the graphic arts on color separation processes. He referred briefly, also, to the electronic color correction research RCA has

underway for the lithographing industry's benefit.

Next on the screen in the meeting room appeared the radio and TV announcer, Jim Hurlbut, familiar to millions as master of ceremonies on NBC's Sunday TV feature, "Zoo Parade." Mr. Hurlbut's job was to present a selection from the award winners in the competition conducted earlier this year by the Lithographers National Association.

This traveling exhibit, Mr. Hurlbut said, had already been seen by 15,000 persons in eight cities. He reminded his hearers that judging for the 1955 competition would be done in Chicago and said first public showing of the 1955 award winners would be held in that city next May.

#### **Panel on Applications**

Feature of the Friday night session was the panel presentation of "New Applications of Lithography." Members of the panel were Thomas H. Mahoney, Regensteiner Corp., president, International Association of Printing House Craftsmen; Joseph Schwartz, Philadelphia platemaker; George Heiland, Foote, Cone & Belding advertising agency; Tom McBreen, J. Walter Thompson agency; and Wade E. Griswold, general manager, LTF, who served as moderator.

In their discussions the panelists covered three-dimension relief maps, lithographed in 12 colors on vinylite plastic sheets and molded to reproduce topographic details; lithographic transparencies on paper or plastic; telephone books, revised day and night to keep up with subscriber changes; the *TV Guide*, printed by all processes, including offset in 13 cities, with up-to-the-minute revisions for station program changes.

They talked, too, of lithographing on fabrics, how color results can be obtained without color copy; about multiple uses of litho negatives; about the conversion process; about continuous tone reproduction, the use of R.O.P. color in offset newspapers and other developments. Bruce Tory of Sidney, Australia, was called on by the panel to discuss use of R.O.P. color by offset on the *Melbourne Argus*.

Closing the panel talks, Mr. Bruno brought up the subject of "relative quality," by showing samples of auto advertising lithography done in 1949. He compared them with 1954 lithographed jobs for the auto companies.

#### **Quality Stressed**

In the past, said Mr. Bruno, lithographers concentrated on production, leaving quality for secondary consideration. Today, in contrast, he asserted, the quality of American lithography, illustrated by the vivid tones of auto metal, "is the envy of our European cousins and of our letterpress competitors, as well, who can't produce anything comparable to what lithography turns out."

Last speaker on the Friday evening program was Richard Kelly, New York architect and illuminating engineer who spoke briefly on "The Psychology of Color."

Present at the various sessions were officers and directors of LTF, headed by J. Louis Landenberger, LTF president, Ketterlinus Lithographic Mfg. Co., and members of the Foundation's research and educational committees.

Among the overseas visitors were two lithographers from Amsterdam, Holland, Bernard van Hessen, president, Rud. Meyer's Drukinkfabriek, N. V., and C. Van der Waerden, president, N. V. De Arbeiderspers. Both were in Chicago in connection with the Netherlands graphic design exhibit on view at the Illinois Institute of Technology.

The Graphic Arts Association of Illinois was commended for financing the demonstration of LTF work.

"It was the most practical way we could figure out," said Frank J. Bagamery, secretary, "to put good litho practice to work in our members' plants."

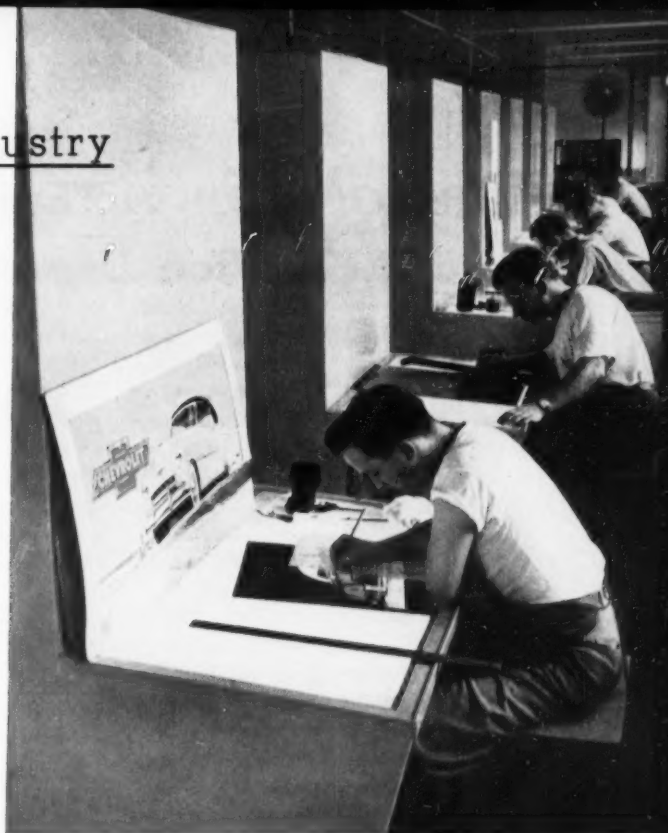
The following firms helped finance the forum: Bradner Smith & Co., Reliable Paper Co., Atwood Paper Co., Lanston Monotype Machine Co., Leedall Stainless Steel Products, Inc., Service Typographers, Inc., Process Color Plate Co., Inc., Midland Paper Co., Sleepeck-Helmar Printing Co., E. G. Ryan & Co.★★



## For the Lithographic Industry

# Will There Be Enough Manpower?

Some of the highest skills are needed in offset lithography. New men are not being brought into the industry and trained fast enough to replace the normal withdrawal of men PIA's study shows.



**T**HE manpower situation in the lithographic industry, already tight, will get progressively worse in the near future unless the industry takes some big steps to prevent it. That is the assertion of a Printing Industry of America report, released as the association gathered in Detroit for its annual convention.

The shortage is most acute among skilled journeymen in the unionized portion of the printing industry—including letterpress plants. The report was issued after a long study by the Union Employers Section of PIA. Key statement in the report is that the industry must double its training efforts to maintain the level of its present work force, not even allowing for expected expansion in the field.

### **Three Reasons**

Three reasons were cited for the critical manpower trends:

1. Approximately 23 percent of the union production workers in the industry are 55 years of age or older;
2. Thirty percent of the unionized journeymen will depart from the industry in the next

10 years because of death, retirement or other reasons;

3. The industry is not training enough apprentices to fill the expected openings.

On the last point, the report states that the industry should be training at least one apprentice for every five journeymen employed but that at present it is training only half this minimum requirement. Hence the conclusion that training efforts will have to be doubled.

The manpower study was begun last year by the Manpower and Recruitment Committee of the Union Employers Section. The study was prompted by the already tightening manpower pinch. And there were many signs that the pinch would tighten further. For example, statistics from the industry's two largest unions showed that the average ages of their members are alarmingly high.

### **Average Ages**

Thus the average ages of journeymen members of the International Printing Pressmen and Assistants' Union of North America and the International Typographical Union

were put at 52 and 48 respectively. Moreover, local surveys made in connection with negotiations over employee benefit plans lend support to the prospects of a bleak manpower future.

The concern over the industry's manpower future is not management's alone. When informed of the employer association's purpose behind collecting and analyzing the industry's manpower statistics, Thomas A. Dunwody, International President of the Printing Pressmen's Union, expressed his approval of the undertaking in these words:

"The International Printing Pressmen and Assistants' Union wholeheartedly endorses this survey as it applies to the commercial printing industry pressrooms under its jurisdiction in various parts of the country. The Union is in accord with the effort of the Union Employers Section to anticipate future manpower conditions. Through such cooperative endeavors, labor and management can contribute to the continued growth and prosperity of an industry which is devoted to the continued expansion of the graphic arts and

*(Continued on Page 107)*

## **DRY OFFSET... Three years' work and 20 million impressions, or**

# **ENGRAVERS BY DEFAULT**

*By E. W. Thomas*

Sales Manager

Speaker-Hines Printing Co., Detroit

Before the St. Louis convention, American  
Photoengravers Assn., Oct. 1954.

**O**UR initial venture in dry offset was undertaken not with the idea of competing with our own lithographic process, but rather as a direct attempt to overcome several thorny problems encountered with publication work, which had been confined to letterpress machinery. This problem can be summed up in a single word: Speed: speed everywhere down the line. Since we had no engraving facilities under our own roof, we started backwards as it were, with the press itself.

We had rotary-offset printing machines; why not take advantage of their speed? We had a long run problem, a natural for rotary impressions, but also a breeder of serious problems for regular offset lithography in the bugaboo of plate instability. This is not to damn with faint praise the post-war developments in multi-metal offset plates, I might add, for we have used these on other types of work. But in deadline printing, one simply cannot afford to have plate failure.

### **Karl Begandt Helped**

Early in 1951 I had the good fortune to meet Karl Begandt, who had already done some work with the manufacture of the magnesium thin metal plates. He acquainted us with some of the pitfalls which would arise in any serious undertaking of this sort. Mr. Begandt's efforts to interest printers had not been especially fruitful up to that

---

*For a summary of the dry offset process and its background, see the articles in the June and July, 1953 issues of MODERN LITHOGRAPHY, which presented a roundup of all information on the process available at that time.*

---

time, but in talking the matter over with him, we could see the great possibilities this process might have to offer if we could quit talking about them and get to work in a cooperative venture and get some ink on paper.

We did this, and he made some small sized plates for a new press which we had just installed. Here on this small press, over a period of many weeks we worked out some of the theory which we feel governs successful printing of this nature. However, due to the nature of the work we had in mind for the process, we concentrated almost solely on halftone reproduction. In this respect, I beg to differ with many who say dry offset is old stuff, and until shown otherwise, will continue to believe that printing combination line and halftone work in the commercial field is new. I am quite certain that it is new in the publication field.

But to get back to the story, as an engraver, Mr. Begandt had the facilities to make the smaller plates, that is, a printing frame, whirler and etching machine; the former two devices on loan from an offset equipment builder in Detroit, and the etching machine which he used in

the course of his regular production.

In those days, he made a great many plates, learning as he went along. Then came the trial and error period of making the bigger press plates, and please believe me when I say trial and error, for every plate at first was a trial and most contained an error or two. Serious errors of course meant make-overs. In due time, however, and at considerable expense to himself, he mastered the platemaking on a larger scale, which of course was necessary for the magazine signatures we were intent on producing.

Several things constantly arose as major hindrances to producing these bigger plates at an economical cost. Two major obstacles were encountered. One was the infrequency with which the plates were needed because of their periodical nature and size. In the first instance, plates were needed only once a month. In the engraver's normal course of production, he used two metals.

When our requirement came along, it meant the introduction of a third metal in the shop, and I am told, and indeed learned the hard way, that this can cause a great disturbance in a small commercial engraving plant. Added to this third metal problem was the fact that it was a plate of unusual size (for a photoengraver but not a lithographer) and thickness requiring different equipment than that found in the usual photoengraving plant.

### Second Obstacle

The second major obstacle was the series of operating steps used to make the plate. All halftone art was prism shot, wet stripped down on glass, the plate metal was hand coated (Gayco hot top had not yet come along) and the printed plates were literally squeezed into the etching machine.

To complicate matters a bit, we required a pair of 16 page signatures. Metal was not then available for anything larger than eight pages per plate. This of course meant four separate eight page sections each registering with one another and one 16 in register with the back up 16. This may sound simple in the telling but I can tell you it was a struggle.

At first, not having a press which would handle more than 16 pages at a time, we printed one part of the publication letterpress and then registered in the other 16, dry offset on the back side of the paper. So we continually had the problem month after month of working the plates into register. During this period we worked out many of the procedures which we today consider standard in so far as the press adjustment goes, and in this connection, there is much more to it than simply an undercut plate cylinder on the press.

### Losing Time

It became increasingly evident, however, that in addition to the plain problem of making the thing print satisfactorily, we were losing time in getting the plates, this partly because of the fact that our factory was situated some ninety miles from the only engraver in the state ready, willing and able to "give 'er a go."

This practical visionary already named, severed his own relationship with his engraving business and came directly to work for us. We proceeded then to take advantage of the one thing the engraver had been unable to do for us: to take advantage of certain lithograph techniques considered quite standard in that branch of the graphic arts. We felt there were things we could borrow from our offset experience, and by improving here and there, cut down on the

time required to manufacture the plates.

Here in our offset department, we had men who were familiar with the single unit plate. Dry stripping of golden rod flats was no mystery to us as lithographers, and certainly a 16 page dry stripped imposition offered no great problem. We could by this means escape from the prism shot art work and the wet stripped glass flats. Some of our friends said it could be done, but only with great difficulty. Our decision was to try it. Needless to say, we never found cause to regret the decision.

We had all the equipment necessary to make the plates with two important exceptions: a burning-in stove and an etching machine. The first public rumblings of the Dow Process were then on the horizon. We felt that we could adapt it later on when more was known about it. For the present, we wanted to devise our own solution. Mr. Begandt had the idea that we could build some sort of rotary cylinder type etching mechanism which could handle the big press plate size we required.

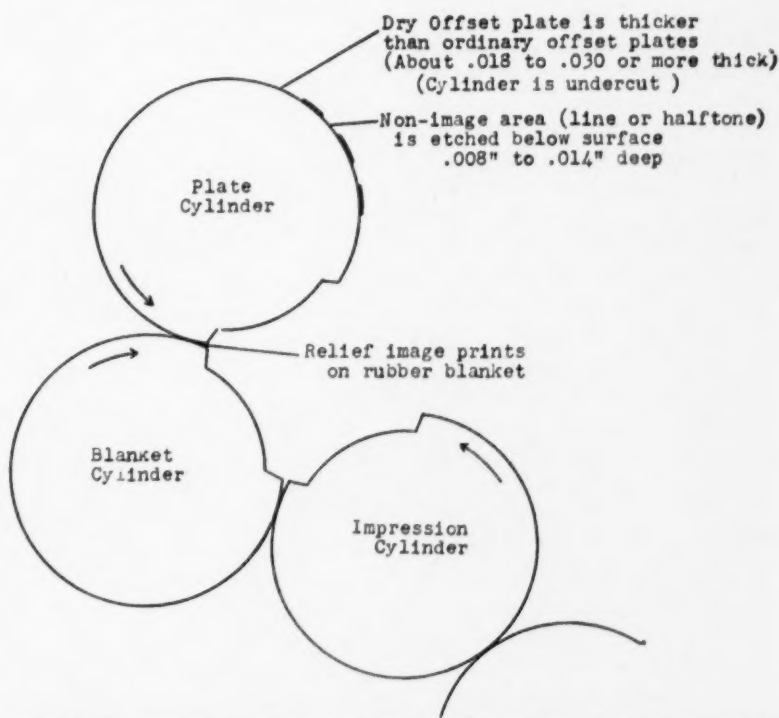
With the aid of Mathew Thocker,

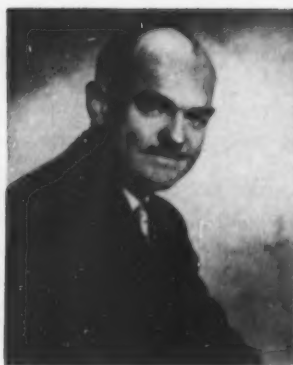
a most capable machinist in Lansing, the home of our factory, we set to work designing such an etching machine, which could accommodate a single plate as large as 42 x 60". Five months from my first rough drawing, the machine was moved in and hooked up. It worked from the first press of the button and forever dispelled the notion that some of us had that there is any great secret trick to etching on a curve. This machine was the key to making big plates and though rather simple, it does a thorough job in short order.

### Machine Is New

The entire mechanism is dissimilar to anything we know of presently existing for etching relief plates. It is cheap to operate, the bath taking only a few minutes to prepare. It will handle one big press plate or several smaller ones simultaneously, etching the load in about four minutes time. In the beginning, we powdered and burned in but it was obvious that even with this necessity, the time required fell far short of the time required for preparing the same number

(Continued on Page 105)





William H. Walling



J. R. Jackman



Harold D. Ross



Harold S. Hutchison

## PIA Reviews Web Offset; Walling Succeeds Rudisill as President

**T**HE recently formed web offset section of Printing Industry of America, Inc., came into its own at the 68th annual convention of PIA last month in Detroit, with a full day of talks and discussion of this expanding field of lithography.

Two speakers told more than 60 offset men attending the special meeting in the Statler Hotel that web offset is big and is getting even bigger. Both Don French, Danner Press, Canton, O. and James Armitage, Inland Press, Chicago, spoke off-the-cuff about web offset, showing examples of periodicals produced in this medium.

The sectional meeting was a part of the big four-day convention of PIA Nov. 15-18, which was attended by more than 1,000 letterpress, offset and combination printers in the United States and Canada. Another section of interest to lithographers is that devoted to rotary business forms printing. That section, too, held a day-long discussion of the field, concentrating on the relative merits of jobbers and salesmen in handling the business.

### Walling Elected

Elected to head PIA for the coming year was William H. Walling, chairman of the board, Rogers Kellogg Stillson, Inc., New York, who was moved up from vice president. Other officers elected by PIA, were the following:

J. R. Jackman, president of Rumford Press, Concord, N. H., vice president; William H. Sleepeck, Jr., president of Sleepeck-Helman Printing Co., Chicago, treasurer; and Harold W. Braun, executive vice president and general manager of Fetter Printing Co., Inc., Louisville, secretary.

In other elections, the members chose Harold D. Ross, vice president and director of Kable Printing Co., Mount Morris, Ill., as new president of the Union Employers Section and Harold S. Hutchinson, vice president of Mack Printing Co., Easton, Pa., as head of the Master Printers Section.

One of the highlights of the convention was presentation of the "Man of the Year" award in the graphic arts field to Elmer G. Voigt, vice

chairman of the board of Western Printing and Lithographing Co., Racine, Wis. Raymond Blattenberger, public printer, made the award to Mr. Voigt, for his activities in graphic arts, including chairmanship of the PIA properties management committee.

More than 100 experts in the graphic arts field spoke at the convention, which had as its central theme, "More Profits Through Better Management." Addresses by top officers of the association and a keynote speech by Gen. Chas. C. Haffner, chairman of the board of R. R. Donnelley & Sons, Chicago, were prominent on the program, but members who print by offset naturally turned their attention primarily to the two meetings on web offset and rotary forms printing.

Mr. French, talking on the topic "What Web Offset Printers Produce," passed out samples of magazines and small newspapers printed in this manner. Included were a large number of foreign publications. He predicted a big expansion in the field and said web offset is an excellent method for certain jobs.



## **Emphasis is on web offset, rotary business forms printing at 68th annual convention of PIA. Outlook for litho is optimistic.**

Mr. Armitage, who filled in for Lester Neumann, Manz Corp., Chicago, who was unable to attend, told how web offset printing can create new markets for the lithographer. He said offset printers should investigate the field carefully and determine just where they can print with web presses economically.

### **Optimistic About Field**

Both men were highly optimistic about the field and aired many problems involved in it in question and answer sessions after each talk. The afternoon session of the meeting,

which was closed, was concerned with the problem of manpower and union relations in "manning" web offset presses. Listed as speakers at this session were Paul Lyle, Western Printing & Lithographing Co.; Hyman Safran, Safran Printing Co., Detroit; Leslie Shomo, National Publishing Co., Washington, D. C.; and C. A. Severin, Hall Lithographing Co., Topeka. H. J. Schultz, Schultz Lithographing Co., Chicago, president of the section, was chairman of both sessions, with James N. Johnson, Standard Publishing Co., Cincinnati, assisting in the morning.

Donald B. Thrush, president, Thrush Press, Inc., introduces panel members in a discussion of wages, hours and working conditions in open shops, at the convention of the Printing Industry of America. The panel included, (l-r.) Joseph Edwards, president, Edwards Bros., Ann Arbor, Mich.; Harold Hutchinson, vice president, Mack Printing Co., Easton, Pa.; Lyman W. Jones, president, The Laurance Press, Cedar Rapids, Iowa; and O. R. Sperry, executive president, R. R. Donnelley and Sons Co., Chicago. Mr. Edwards discussed the factors determining working conditions and hours. Mr. Hutchinson's topic was the part played by fringe benefits in

employee morale, while Mr. Sperry spoke on the setting of wage policies. The convention was held at the Hotel Statler, Detroit. Those attending were encouraged in promptness by the awarding of door prizes to those who arrived early at each meeting.

A special feature of the convention was a group of question centers set up at the Statler Hotel, available to the conventioners at specified hours. The rooms were informal in their conduct, manned by qualified persons from each field. Two of the rooms were assigned to the Master Printers Section and the Union Employers Section. Four other rooms were open for discussion of such topics as sales training and ratio studies.

### **Web Offset**

The web offset section was formed last February to serve a special need within the association. Formed a little later was the rotary business forms section. Like the web offset group, it too devoted a full day to discussion of the field. Speaking at the morning session which had Max Clarkson, Clarkson Press, Buffalo as chairman were Jack Kennedy, Egly Register Co., Dayton, O.; Carroll D. Blanchard, The Rein Co., Houston; and R. A. Addison, National Carbon Coated Co., Sturgis, Mich. Mr. Clarkson told why his company uses salesmen only, Mr. Blanchard discussed his company's use of salesmen and jobbers and Mr. Addison outlined National's policy of using jobbers only.

The formal talks, and the discussion period which followed indicated that companies desiring close control over their products tend to employ their own salesmen, while companies which are not concerned with this factor lean to jobbers. Joseph Steir, Alfred Allen Watts Co., Belleville,





**Elmer G. Voigt**, right, vice chairman of the board of Western Printing and Lithographing Co., Racine, Wis. was honored with the "Man of the Year" award in the graphic arts field. Among his many activities in the industry, Mr. Voigt is chairman of the PIA properties management committee. Presentation of the award was made by Raymond Blattenberger, public printer of the United States, during the convention. The commemorative award is given annually for outstanding contribution to the graphic arts industry.

N. J., president of the section, presided at the formal morning session and the closed discussion period in the afternoon, which was devoted to determining production pars for rotary forms presses and wage scales for printers using this equipment. Leading these discussions were Don Sommer, PIA technical director and Edmund J. Flynn, Union Employers Section of PIA.

In addition to general sessions of the convention, dealing with overall industry problems such as sales management, evaluating the production problem and policy and executive training, the convention included day-and-a-half sessions of both the Union Employers Section and the Master Printers Section of PIA.

#### **Rudisill Speaks**

At the opening general meeting, outgoing president James J. Rudisill, Rudisill & Co., Inc., Lancaster, Pa. summarized the year's activities in the association while Mr. Walling, as vice president, took a look at the future. Keynote speaker, General Haffner followed.

Mr. Rudisill concentrated on the growth of PIA since its reorganization nine years ago, from 2,000 members then to 5,000 this year. He said dues income, which totaled \$100,000 then, is expected to be \$250,000 this year. He added that "for many years many members of the industry have dreamed of the time when every part of the industry would be consolidated

into one national foundation" but that there is "no hurry about it." Nevertheless, he added, there are "straws in the wind" that this consolidation could come about in the future.

In other fields, Mr. Rudisill cited the work of the organization in influencing enactment of the recent federal tax bill. He also praised PIA's management services, including the series of books on various phases of printing that have been or are being issued.

Mr. Walling called on the group to utilize the material available to the association. Referring to the production par developed by the group, he said "it is just as important to bring about the utilization of our materials as it is to produce them." He also urged the membership to attend professional conferences of PIA, declaring "it is my hope that PIA will not become so involved in new major ventures as it will in the perfection of services available and in the strengthening of follow-through to bring about the use of these services."

#### **Weak in Research**

In the keynote address, General Haffner asserted that the printing industry is "woefully weak" in the field of research. He said that the large number of small companies in the industry, together with the inability of machinery and process suppliers to allocate sufficient funds to research have been conducive to

the "poor progress we have made when compared with many industries."

Among the many speakers at the convention, those connected with the litho field included the following: John A. Hanley, Douglass Offset Co., Detroit; Robert H. Caffee, Wm. G. Johnston Co., Pittsburgh; George F. McKiernan, George F. McKiernan & Co., Chicago; Robert E. Russell, managing director, Research and Engineering Council of the Graphic Arts Industry, Inc.; Dr. Roy B. Eastin, executive assistant to the Public Printer; George S. Dively, president of Harris-Seybold, Cleveland; Horace Hart, The Leo Hart Co., Rochester; and William H. Sleepeck, Jr., president, Sleepeck-Helman Printing Co., Chicago.

A full calendar of social events for members of PIA and their wives was included on the program. Another feature of the convention was the announcement of PIA Printer's and Lithographer's Self-Advertising awards, which are listed in a separate article in this issue.

Before adjourning PIA voted to hold next year's meeting at the Chalfonte-Haddon Hall Hotel in Atlantic City.

A call for funds to construct a beautiful colonial style headquarters for PIA on Chevy Chase traffic circle in Washington, D. C., was made at the convention. Plans are proceeding for the construction, it was stated.★★

# Photo-Composing

## 9. Maintenance

*By Charles W. Latham*

**I**T must be thoroughly understood by the operator of any machine that cleanliness, lubrication, and careful adjustment are necessary to produce good results. This is particularly true of precision equipment such as photo-composing machines.

The negative frames must not be handled roughly or they will become burred or scratched, and their fine adjustments and fit impaired. The adjusting screws must not be allowed to become rusty, bent or too worn. The glass clamps and other small items must be kept in good order. The air seals must not be damaged or allowed to get dirty or have any oil on them.

Above all, the dowel pin bushings must be kept clean and replaced when any play occurs between them and the pins. The pins on the Register Device must also be kept in good order and replaced when worn. Keep the register glass clean so it won't scratch the negatives. Keep the lines perfectly vertical and horizontal and make sure there is good strong light behind them.

Do not allow carbon clamps in the lamp to become burned and pitted. This happens when the clamps are not in good contact with the carbons. The screws or other tightening means may become faulty or warped by heat so that the carbons are not clamped tightly. This causes arcing and burning of the clamps.

Gears, gear racks, screws, etc., must be kept clean and oiled to reduce wear and maintain accuracy. When excessive backlash develops, adjustment or replacement of some part is required. Worn or damaged

cables on counter weights must be replaced. They will last a long time if kept clean and oiled, and if the sheaves run free.

Motors and vacuum pumps must be lubricated by special oils. Follow directions carefully and do not use ordinary machine oil. Do not overload pumps. It is a very rare occasion when more than 15 inches of vacuum is necessary for good contact.

If the plate bed or anything else appears to be out of alignment, call a service man to check the machine. There is a means of aligning anything that goes out, but it requires a trained man to do some of this work.

If a book of instructions for the care, maintenance and lubrication of your machine is available, keep it in a handy place and use it. It was written by the builders of the machine. They know what is necessary to maintain it. A well-kept and well-adjusted machine will save the operator a lot of annoying troubles and make work lighter.

Maintenance does not start or stop with the machine. The operator should feel a responsibility for his whole room or department. Cleanliness and orderliness are important to both accuracy and workmanship, quality of work, and safety. If dust and dirt are allowed to accumulate on the machine, auxiliary equipment, shelves, tables or floors, trouble is apt to follow. Poor storage of plates, negatives, glass supports, tools, frames, and other incidental equipment is bad practice. Carelessness with equipment and instruments can only lead to sloppy work.

Men who work in cluttered surroundings often have the same mental condition. Invariably they excuse themselves by saying that they do not have time to clean up. The question is, does lack of time account for the disorderly condition or is the poor working condition responsible for the lack of time. Nine out of ten times it is the latter. The operator has to hunt for things, or he finds them damaged, or dirt interferes with the proper operation of something that should be clean. He loses time.

A man is judged by the kind of house he keeps. His work will reflect his attitude toward cleanliness and orderliness. He does not have to be fanatically clean. All that is necessary is that equipment be in good working order at all times. Worn parts should be replaced, and proper adjustments made when required. All working parts should be cleaned and oiled on some schedule.

The floor should be clean, and free of things over which one might fall. Nothing should be leaned against a wall where it might slip. Table and bench tops should be clear of everything that does not belong there. Frames should be returned to their racks and tools to their drawers. Incidental supplies like carbons, tape, masking materials should have their place and be returned to it after use. Good housekeeping in the photo-composing room will pay off.

(This is the final article of a series taken from the new book, "Photo Composing," just issued by the Lithographic Technical Foundation, 131 East 39th St., New York 16, N. Y. This book, by Charles W. Latham, long-time LTF staff man and lithographic consultant, is the first such work ever published on the subject.—Editor.)★★

## Prize winners for '54:

# Here's How Offset, Letterpress Used Self-Advertising

**A**N increasing interest in self-advertising on the part of printers and lithographers was shown at the Printing Industry of America convention last month in Detroit. The occasion was the third annual award of cash prizes and trophies in the PIA Printer's and Lithographer's Self-Advertising contest.

Standout among the very attractive entries was that of Fine Arts Litho Co., which won its third straight Benjamin Franklin statuette.

As usual, the contest was divided into two categories: best self-advertising campaign and best self-advertising individual specimen. In each group, three divisions were made for shops employing 19 or fewer men, 20 to 100, and more than 100. First and second awards, honorable mention certificates and "Best Fifty" certificates were given for campaigns and the same awards, except for second place prizes, were made for the individual specimen entries.

The five-man jury for the exhibit was unanimous in stating that the quality of the entries was greatly improved over last year. As Henry Hoke, of Reporter of Direct Mail Advertising, said in his remarks as chairman of the jury: "we were unanimous in observing that almost all the entries in 1954 showed a definite and unmistakable improvement . . . both in presentation and content."

Many of the persons who viewed the award winners exhibit at the

Statler Hotel agreed with the judges. The displays attracted a big audience from convention members.

The Fine Arts entry won \$1,000 and a "Benny" for its campaign in the small shop category. Winners for medium and large sized companies were The Craftsman Press, Inc., Seattle and Wetzel Brothers, Milwaukee, respectively.

Winners of Bennys for individual specimens, starting with the small category were Mailograph Co., Inc., New York; The Baughman Co., Richmond; and R. R. Donnelley & Sons Co., Chicago.

Second prize winners of Bennys for campaigns, in the same order, were The Hub Offset Co., Boston; Douglas Offset Co., Detroit; and McCormick-Armstrong Co., Inc., Wichita, Kan.

Honorable mention certificates for campaigns were awarded as follows:

Companies with 19 or fewer employees: Arcade Printing Co., Chattanooga, Tenn.; Findlay Printing & Supply Co., Findlay, O.; John Green Press, Inc., Rockford, Ill.; Mailograph Co., Inc., New York; Seyler-Nau Co., Cincinnati; and Frank R. Wilke Printing Co., Milwaukee, Wis.

Companies with 20-100 employees: Baker-Britt Corp., Newark, N. Y.; Fetter Printing Co., Louisville; Fisher Corp., Ltd., Honolulu; Lebanon Valley Offset Co., Inc., Cleona, Pa.; Sunprinting, Vancouver, B. C.; and Veritone Co., Chicago.

Companies with 100 or more employees: Davis, Delaney, Inc., New

1. Full color calendar, with picture of Williamsburg, Va. is featured on Baughman Co., Richmond, individual specimen which won first prize in small plant competition.

2. Booklet on house organs won for Wetzel Brothers, Milwaukee, in campaign for large shops.

3. Series of comments of great men of history was utilized by Fine Arts Litho Co., Dallas in its campaign in the small shop class.

## The Winners ►

4. This individual specimen by R. R. Donnelley & Sons Co., Chicago, won first prize in the large plant category.

5. Craftsman Press, Inc., Seattle, won a first prize of \$1,000 for its campaign using its "Advertiser's Digest." Company is in medium sized group.

6. A "Thinkubator of Ideas" was the motif on this individual specimen winner submitted by Mailograph Co., Inc., New York.





York; R. R. Donnelley & Sons Co., Chicago; William G. Johnston Co., Pittsburgh; Milprint, Inc., Milwaukee; E. F. Schmidt Co., Milwaukee; U. S. Printing & Lithograph Co., Cincinnati; and Western Lithograph Co., Wichita.

For individual specimens, honorable mention was given to the following:

Companies with 19 or fewer employees: Pocono Press, Cresco, Pa.; Turck & Reinfeld, Inc., New York; and Western Printing Co., Tulsa.

Companies from 20-100 employees: Drake Press, Philadelphia; Egan Co., Dallas (two awards); Schneidereith & Sons, Baltimore; Warner P. Simpson Co., Columbus; and Stewart-Simmons Co., Waterloo, Ia.

Companies with 100 or more employees: Dittler Brothers, Inc., Atlanta; McCormick-Armstrong Co., Inc., Wichita, Kan.; Rumford Press, Concord, N. H.; E. F. Schmidt Co., Milwaukee; and Von Hoffman Press, St. Louis.

The awards were made at a breakfast sponsored by Miller Printing Machinery Co. in the grand ballroom of the Statler, Nov. 16, before nearly 500 conventioners. James J. Rudisill, outgoing president of PIA, gave a brief introductory speech citing the value of the contest. He was followed by R. B. Tullis, president of Miller, who talked on the advantages of self-advertising, and presented the three checks for \$1,000 to the campaign first prize winners.

An entertaining talk by Gene Flack, sales counsel and director of advertising for Sunshine Biscuits, Inc., climaxed the breakfast meeting.

The jury suggested that future contestants "be more careful or more specific in their entry statements. Do more describing of the purpose, the use, the results."

Following are the firms whose entries were judged to be among the best fifty campaign specimens:

For printers and lithographers with 19 or less employees:

Arcade Printing Co., Chattanooga, Tenn.; The Art Press, Inc., Irvington, N. J.; Fenn & Fenn, New York; The Findlay Printing & Supply Co.,

Findlay, O.; Fine Arts Litho Co., Dallas; John Green Press, Inc., Rockford, Ill.; The Hub Offset Co., Boston; The Litho Studio, Inc., New York; Mailograph Co., Inc., New York; E. John Schmitz & Sons, Inc., Baltimore; Scott & Scott, Santa Monica, Calif.; Sequoia Press, Kalamazoo, Mich.; The Seyler-Nau Co., Cincinnati; South Shore Printers, Chicago; Thompson Printing Co., Clifton, N. J.; Wainick Printing Co., Inc., New York; Frank R. Wilke Printing Co., Milwaukee.

For printers and lithographers with 20 and less than 100 employees:

Baker-Britt Corp., Newark, N. Y.; The Craftsman Press, Inc., Seattle,

*Miller Printing Machinery Co., which sponsored the awards breakfast, also did a speedy job of reporting the results in its "PIA Pix," a four-page picture newspaper that was distributed in the Statler the same evening.*

Wash.; Douglas Offset Co., Detroit; The Du Bois Press, Rochester, N. Y.; The Egan Co., Dallas; Fetter Printing Co., Louisville, Ky.; Finlay Brothers Co., Hartford, Conn.; Fisher Corp., Ltd., Honolulu; The Hall Lithographing Co., Topeka, Kan.; Lebanon Valley Offset Co., Inc., Cleona, Pa.; Minott Printing & Binding Co., Greenfield, Mass.; Rudisill and Co., Inc., Lancaster, Pa.; Sander-son Brothers, North Abington, Mass.; Sunprinting, Vancouver, B. C., Canada; Thomason & Morrow Co., Fort Worth, Tex.; Veritone Co., Chicago.

For printers and lithographers with 100 or more employees:

The Beck Engraving Co., Inc., Philadelphia; Davis, Delaney, Inc., New York; R. R. Donnelley & Sons Co., Chicago; Charles R. Hadley Co., Los Angeles; The A. B. Hirschfeld Press, Inc., Denver, Colo.; William G. Johnston Co., Pittsburgh; Kable Printing Co., Mt. Morris, Ill.; Laurel Process Co., Inc., New York; McCormick-Armstrong Co., Wichita, Kan.; Milprint, Inc., Milwaukee; Safran Printing Co., Detroit; The E. F. Schmidt Co., Milwaukee; John P. Smith Co., Inc., Rochester, N. Y.; The United States Printing and Lithograph Co., Cincinnati; Western Lithograph Co., Wichita, Kan.;

Wetzel Brothers, Milwaukee; Williams & Marcus Co., Philadelphia.

Following are the firms whose entries were judged to be among the Best Fifty Individual Specimens:

For printers and lithographers with 19 or less employees:

The Jack Bonner Co., Corpus Christi, Tex.; Dowdell-Merrill, Inc., Dallas; The Findlay Printing & Supply Co., Findlay, O.; Mailograph Co., Inc., New York; Pacific Printers, San Rafael, Calif.; Pied Piper Press, New York; The Pocono Press, Cresco, Pa.; Quality Press, Inc., Milwaukee; Regina Services Corp., Brooklyn, N. Y.; Scott & Scott, Santa Monica, Calif.; Slicks Engraving Co., South Bend, Ind.; Turck & Reinfeld, Inc., New York; Western Printing Co., Tulsa, Okla.

For printers and lithographers with 20 and less than 100 employees:

Ace Offset Printing Co., Los Angeles; The Baughman Co., Richmond, Va.; Besig & Co., Inc., Buffalo, N. Y.; The Drake Press, Philadelphia; Duenewald Printing Corp., New York; The Egan Co., Dallas; Finlay Brothers Co., Hartford, Conn.; Kansas City Poster Co., Kansas City, Mo.; Wm. J. Keller, Inc., Buffalo, New York; Kerr Printers & Stationers, Los Angeles; Sanderson Brothers, North Abington, Mass.; Schneidereith & Sons, Baltimore; The Warner P. Simpson Co., Columbus; Stewart-Simmons Co., Waterloo, Ia.; The Studio Press, Inc., Indianapolis; The Winchell Co., Philadelphia.

For printers and lithographers with 100 or more employees:

The Beck Engraving Co., Inc., Philadelphia; H. S. Crocker Co., San Francisco; Davis, Delaney, Inc., New York; Dittler Brothers, Inc., Atlanta; R. R. Donnelley & Sons Co., Chicago; W. A. Krueger Co., Milwaukee; McCormick-Armstrong Co., Inc., Wichita, Kan.; The Rumford Press, Concord, N. H.; The E. F. Schmidt Co., Milwaukee; The United States Printing & Lithograph Co., Cincinnati; Universal Printing Co., St. Louis; Von Hoffmann Press, Inc., St. Louis; Webb Publishing Co., St. Paul, Minn.; Western Lithograph Co., Wichita, Kan.★★

## PHOTOGRAPHIC

# Clinic

*By Herbert P. Paschel*  
Graphic Arts Consultant

**Q:** Is the focal length engraved on a lens barrel an accurate figure to use in calculating a focusing scale?—J. B. C., Newark, N. J.

**A:** No. The focal length marked on a lens is only an approximation. The actual focal length may be as much as 10% shorter or longer than indicated and will rarely be an even figure such as 19", 24", etc. In order to calculate a focusing scale with utmost precision the exact focal length and the nodal separation must be known. These figures can be obtained from the manufacturer of the lens, or by testing the lens on an optical bench. Such tests are also made, for a small fee, by the U. S. Bureau of Standards.

**Q:** In making halftones with an engraved screen we often get a double set of dots over the entire image area. The extra dots either fall in between the main dots or overlap with them. This causes a very odd and distorted dot pattern and the negatives are useless. The difficulty is experienced only at certain camera settings. Can you explain this?—H. K. L., Boston, Mass.

**A:** This defect can manifest in two ways. By far the most prominent is a double set of dots resulting in two distinct images of the copy, neither image being of adequate density. This may be due to a movement, during exposure, of either the lens, the sensitive material, the copy, or all three. This would indicate some defect in the camera parts. In the second possibility, the image remains perfectly sharp and fully exposed, the extra dots being of uniform or varying density over the entire area. This would indicate that either the halftone screen

This is one of a series of "Photographic Clinics," consisting of questions and answers covering all phases of photography for lithographic reproduction. Mr. Paschel is a well-known consultant and contributor to this magazine. Subscribers should send questions to

Herbert P. Paschel  
c/o Modern Lithography  
Box 31  
Caldwell, N. J.

shifted during the exposure or that a secondary exposure took place from some source other than the lens. Such a secondary exposure often comes from a leak in the lensboard, the bellows, or some other part of the camera.

This latter situation seems to me to be the logical explanation for your trouble since a leak in the bellows, for example might permit light to reach only the sensitive material when the bellows is compressed or expanded in a certain way in relation to the camera lamps or some other source of light. The fact that your trouble occurs only at certain camera settings makes this a very strong possibility. To establish whether or not this is the cause of your trouble check the camera for leaks. Would also suggest you make a test at a focus you know to have been troublesome.

Proceed as you normally would in making a halftone but for the test keep the lens covered or shutter closed. Expose for about 50% above normal time. If a dot pattern develops on the film or plate, the secondary dots are definitely due to light

reaching the film from some point other than the lens. Distorted dots are sometimes also caused by using Waterhouse stops, or flash stops, that are not centered with the optical axis of the lens.

**Q:** In textbooks the primary colors of light are defined as being red, green, and blue. At the same time, the printing primaries are described as being red, blue and yellow. This is very confusing. Are the red and blue the same in both cases; and why two different sets of colors?—V. J. L., Baltimore, Maryland.

**A:** First, a definition is necessary. The word primaries refers to the minimum number of colors whose mixture will duplicate the full gamut of color sensations. The primary colors of light are based on the manner in which the human eye interprets color, and are a red, green and blue which divide the spectrum into three parts.

When describing the primaries of surface colors such as paints, inks, etc., the use of the terms red, blue and yellow is definitely in error. Surface colors achieve their colored appearance by subtracting some part from the incident white light (which is conceived as being composed of a balanced mixture of red, green and blue rays) and reflecting the remainder. Thus, a blue ink subtracts the red and green components of white light and reflects only the blue. Yellow, on the other hand, subtracts blue and reflects green and red. When two subtractive colors are mixed, the

(Continued on Page 107)



## Around the U. S. As Printing Week Plans Progress...

More widespread interest in Printing Week has been shown throughout the country in recent weeks. Complete coverage of the event will be in next month's issue. On this page are some photographic highlights:

**Washington**—Dorothy Malone, star of Warner Bros., joins Raymond Blattenberger, public printer, in urging all citizens to celebrate International Printing Week, Jan. 16-22, 1955.



**Philadelphia**—the annual Printing Week in Philadelphia Show, scheduled for the Benjamin Franklin Hotel, Jan. 17 to 20, will be under the direction of 20 sponsoring organizations from the Philadelphia graphic arts industry. Pictured are the chairmen of the various committees, who will be in charge of the industry celebration. (L-R) Matthew J. Colfer, American Type Founders, Inc., chairman of trade exhibit committee; G. L. McCormick, Allen, Lane & Scott, chairman of printing exhibit; Frank H. Barras, N. W. Ayer & Son, Inc., general chairman of Printing Week; Alfred Snowden, D. L. Ward Co., chairman of speaker & film committee and Thomas H. McCabe, Jr., Printing Industries of Philadelphia, Inc., chairman of budget committee.



**Chicago**—Mayor Kennelley signs the proclamation for 1955 Printing Week in Chicago, as graphic arts industry leaders look on. (L-R) Edward M. Egan, assistant sales manager, the Twentieth Century Press, Inc., treasurer of Chicago Club of Printing House Craftsmen, local sponsors of 1955 Printing Week; William H. Sleepack, Jr., Sleepack-Helman Printing Co., president of Graphic Arts Association of Illinois; Wayne V. Harsha, editor of *Inland Printer*, and general chairman of Chicago's Printing Week celebration; Steve Sluka, Vogue-Wright Studios, president of Chicago Club of Printing House Craftsmen; and Henry L. Coco, secretary, Chicago Allied Printing Trades Council.



**January 16-22, 1955**



# Technical

## SECTION

### Progress Report on the LTF Press Inkometer

## Ink-Water Balance In Printing

*By George W. Jorgensen*

Supervisor  
Lithographic Technical Foundation

**P**ART of the skill of an experienced pressman is his ability to balance the ink and water properly. A certain minimum amount of water is needed to keep the plate from catching-up. This amount varies principally with the type of plate, and the ink and paper being run.

When you run with more water than this minimum, it has bad effects. The excess water accumulates on the press rollers and causes the ink to pile. This condition results in poor ink transfer to the plate, the blanket, and the paper. It produces a press sheet with a washed-out appearance.

Ordinarily, you get the best results with an ink-water balance that uses the least possible water. However, in between this minimum and a balance where the water is definitely excessive, there appears to be a range of ink-water balance that will print commercially acceptable work.

The pressman has a constant problem in trying to stay within this "acceptable" range. Each new job has its own proper ink-water balance which should be established at the start of the run.

If this balance varies during the run, there will be variations in ink-run; there will be variations in ink-transfer. This, in turn, will cause variations in ink lay on the sheet and variations in the quality and appearance of the printing. The more we studied this situation at LTF, the more we came to believe that other problems such as ghosting and poor trapping on multi-color presses were also often caused by improper ink-water balances.

These problems have been around for a long time. It has been difficult to study them because we didn't have suitable instruments. Because of this, no one knows very much about the things that affect ink transfer in litho printing.

The lack of this knowledge became an increasingly serious handicap in our present work on the factors affecting image quality. So, we made an intensive search for instruments that might be able to give us the information we needed.

After several years of experimenting, we finally developed an instrument that shows considerable promise.

We call it the LTF Press Inkometer. It mounts against one of the rollers in the press inking system. As the press operates, it gives a continuous reading of the ink's apparent tack on the dial of an electric meter.

There has been very little scientific study of ink flow and transfer *when there is water on and in the ink*. So, most of our work with the Press Inkometer to date has had to be empirical—that is, based on the observation of trial and error experiments. As the study is in a very early phase we still don't know the instrument's full possibilities. From the work that we have done, however, it looks very promising as an ink-water balance control device. Most of our work so far has been on the control of ink piling.

#### **Inkometer Principle**

Back in the late 1930's, R. F. Reed developed the Bench Inkometer at LTF<sup>1</sup>. This device is used primarily by ink makers to standardize the tack and length of ink.

The Inkometer principle employs two inked rollers. One roller is driven.

The other roller rides on and is driven by the first one. When the rollers revolve, the tack of ink, or its resistance to being split, develops a torque or a force that pulls the driven roller in the direction of rotation. This torque is similar to the force felt by the finger when you estimate ink tackiness by a "finger-tap-out." A measurement of this torque can be used as a measurement of the ink's tack.

In the past, some have criticized the Inkometer because it gives no information about the ink's viscosity or its yield value. However, the Inkometer is the only instrument with an action that is similar to a press. And, it has proved easier to predict an ink's press performance from Inkometer data than from viscometer data.<sup>2</sup>

We were encouraged to go ahead with the development of a Press Inkometer by results from studies by Sjodahl<sup>2</sup> and Hull<sup>3</sup> on ink flow and transfer. These included studies of 1. the effect of finely dispersed air in ink films, 2. the elastic properties of ink, and 3. the formation of filaments or strings between ink films as they leave the nip between two rollers that are in contact. All of these studies indicated that the Inkometer was well-suited to measure ink consistency.

After developing several designs, we finally decided on one that uses an electrical strain gauge. This is an important feature since it permits a continuous reading of the ink's apparent tack while the press is running.\*

About this time, we learned that Mills, Gates, and Lawson at PATRA\*\* in England had already attached an Inkometer of their own design to a press.<sup>4</sup> At that time they had made no extensive studies of its behavior in lithographic (water-with-ink) printing. Their instrument was also based on the original Inkometer

\*"Tack" is usually defined as an ink film's resistance to being split. The Press Inkometer, however, measures the force required to split a film of water and ink mixture. Its readings, therefore, are not strictly the tack of the ink. For lack of a better term, we say that the Press Inkometer measures the "apparent" tack of the ink on the press.

\*\*Printing, Packaging, and Allied Trades Research Association, Leatherhead, Surrey, England.

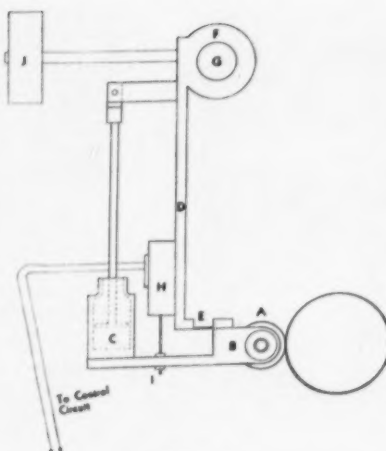


Figure 1

The roller **A** mounted in ball bearings in the frame **B** is placed against a roller in the press inking system. The opposite end of **B** supports an oil type dashpot **C**. This permits a smooth signal from the instrument by dampening press vibrations. The lower frame **B** is fastened to an upper frame **D** through a torsion plate **E**. This plate is a thin piece of spring metal. A bearing **F** is mounted at the top of the upper frame **D**. The bar **G** passes through the bearing and extends across the press. This bar, which is fastened to the sides of the press, supports the instrument. It also allows the instrument to be moved across the roller. The entire unit is gravity loaded against the press roller by the weight **J** and pivots on the bearing **F**. In operation, the press roller drives the Inkometer roller **A**. The splitting of the ink film between these two rollers as they separate after rolling in contact produces a torque. In other words, the tack of the ink pulls roller **A** in the direction of its rotation. Since frame **B** is fastened to frame **D** with a spring plate, the tack of the ink makes frame **B** pivot slightly. The movement of **B** is relayed to an electrical strain gauge **H** by the stud **I**. Here, the amount of **B**'s movement is converted to an electrical signal that can be read on the microammeter of the control circuit. The maximum displacement of frame **B** at the stud **I** is less than 0.001 inch.

principle, but did not give a continuous reading.

Our first model was a bow type. Press tests showed that it worked satisfactorily but its sensitivity was rather low. We then made a second model using a different frame design and a more sensitive strain gauge. It is about five times as sensitive as the first model and has been in use on an LTF press for about a year and a half. It is mounted so that the Inkometer roller rides on the No. 1 vibrator (nearest the dampeners). It can also be mounted against the No. 4 form roller or the vibrators above these form rollers. Figure 1 is a schematic drawing of the instrument that shows how it works.

The zero end of the instrument scale is set by running a thin film of kerosene or naphtha on the press rollers. The sensitivity of the control circuit then is adjusted so that a full scale reading of the microammeter requires more torque than that produced by the tackiest inks.

When the press is operating, the ink picks up water from the dampening system. This reduces the ink's apparent tack so that readings during the run are some place between zero and full scale.

The apparent tack "scale" is determined by the physical and electrical constants of the Press Inkometer. The readings are interpreted on a comparative rather than an absolute basis. In other words, through trial and error experience, a range of Inkometer readings is selected for each ink based on the best sheets printed. This range is then used as a guide or standard for future work of the same type. These satisfactory ranges, of course, will vary with different sets of press conditions, that is, different papers, inks, etc.

#### Ink Piling

Ink "piling" is the term used to describe poor ink transfer. The ink tends to "cake" or pile up on the rollers. When piling occurs, the ink film on the dots and solids on the printed sheet is not continuous. White specks appear. This makes the press sheet look gray or washed-out. (See Figure 2). As the condition becomes worse, streaks appear like those you see on flooded plates.<sup>5</sup>

Piling is usually caused by running too much water or too little ink. If this condition is developing, the Press Inkometer reading will begin to drop toward the low side or the "satisfactory" range. By examining the rollers and press sheets it is possible to determine if the ink feed should be increased or the water feed decreased. Adjustments are then made until the Press Inkometer reading is again in the "satisfactory" range.

A similar procedure is followed when half-tones want to plug or catch-up. In this case, the Press Inkometer readings would be above the "satisfactory" range . . . that is,

when the ink doesn't contain enough water.

#### **Cause of Ink Piling**

It appears that excess water produces piling in the following way: The form rollers pick up fountain solution from the plate, particularly from the image areas, and mechanically work it into the ink on the rollers of the inking system. This water is dispersed on and in the ink film in tiny droplets.

When the ink films on any two rollers contact and then separate, the ink films pull apart in short strings or filaments. This disturbs the ink to a considerable depth into the film on each roller. It may cause some of the water droplets that were already on the rollers to be worked into the ink films while the remainder pass through the nip and remain on the surfaces of the rollers. Also, it may cause some of the water droplets that were within the ink to appear on the surface.

The surface droplets are quite small, usually about 0.001 inch or less in diameter. It is easy to see them on the form roller, particularly where it has just passed over an image area on the plate, with a low power magnifier using light from a low angle. They remain visible up to about 20 seconds. It is likely that these visible droplets are comparatively large ones formed by the combination of many other smaller droplets.

The splitting of the ink film between the form rollers and the plate

image constantly forms a new supply of the droplets on the surface of the rollers. These droplets help produce the ghost of the plate image that you see on the form rollers.

In this same manner, water droplets on the surface of the ink film on the plate image transfer to the blanket and from the blanket to the paper. If the water droplets on the blanket are excessive, they prevent a good transfer of the ink to the paper.

So long as the water on and in the ink is not excessive, it does not interfere with ink transfer and possibly helps keep the non-image areas clean. Too much water interferes with proper ink transfer between rollers, from roller to plate, plate to blanket, and blanket to paper.

This droplet formation occurs regardless of whether the plate is run with dampeners or with other systems that add water directly to the inking system.

Under average conditions, the moisture content of ink during the run is generally believed to be between 5% and 15%.<sup>6</sup> A recent more quantitative study by Winter and Lawson of water emulsification and the effects of surface droplets has shown that even higher percentages of water can be milled into the ink.<sup>7</sup>

Apparently, one of the principal measurements that the LTF Press Inkometer makes is the effect of different amounts of water on and in the ink. When these amounts of water change, the splitting characteristics of the ink film between two rollers

and the formation of ink filaments also are changed. The greater the amount of water present, the lower the apparent tack measurement of the ink film.

Considerable testing still is required before we'll know if the Press Inkometer will be helpful as a production control instrument in a plant. Two units have been built and are being checked on large multi-color presses to determine their value with regard to piling and trapping problems.

The work still needed includes studies of the effect of such factors as temperature, press speed, roller composition, and ink and fountain solution composition.

#### **Summary**

LTF's Inkometer principle of measuring ink tack can be successfully adapted for use on a press. It has already shown value as a research tool, and shows promise of use as a production control both on single and multi-unit presses. Although the present studies are largely trial and error, they may later lead to a better understanding of the fundamentals of the lithographic process.

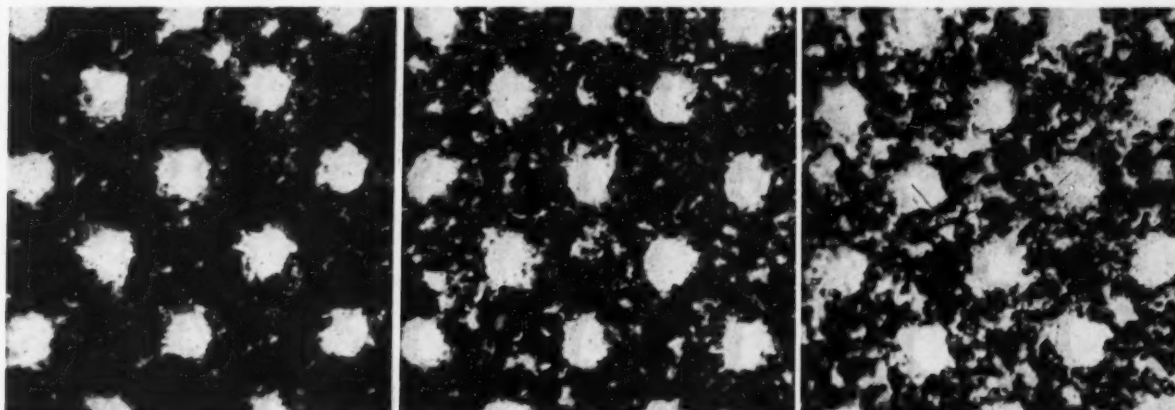
#### **References**

<sup>1</sup>Reed, R. F. *The Inkometer*, LTF Technical Bulletin No. 2, Research Series No. 4, LTF, N. Y., 1939.

<sup>2</sup>Sjodahl, L. H., "Ink Flow on Rotating Rollers", Proceedings of the First Annual Meeting, TALI (now TAGA), April, 1949.

<sup>3</sup>Hull, H. H., *Viscoelasticity of Print-*

FIGURE 2: These photomicrographs (below) of a 133 line halftone on enameled stock show, (l. to r.) slight, moderate and severe piling.





ing Ink, Proceedings of the Third Annual Meeting, TAGA, May, 1951.

\*Mills, C. C., Gates, E. R., and Lawson, L. E., "Preliminary Study of the Behavior of Ink on a Printing Machine Using the Inkometer Principle", Private Communication, PATRA, October, 1950.

\*MacDonald, D. J., *Offset Press Troubles*, Bulletin 501, LTF, N. Y., 1944, p. 73.

\*Reed, R. F., Cadwell, L. E., and

Benemelis, R. L., *The Drying of Lithographic Ink*, LTF Research Bulletin No. 213, LTF, N. Y., 1944, p. 40.

\*Winter, K. L. and Lawson, L. E., *The Emulsification of Dampening Solution With Lithographic Printing Ink*, Private Communication, PATRA, December, 1953 also *The Interference With The Transfer of Ink by Surface Moisture in Lithography*, Private Communication, PATRA, March, 1954.

## Technical

### BRIEFS

#### Abstracts of Current Literature in the Graphic Arts

These abstracts of important current articles, patents, and books are compiled as a service of the Lithographic Technical Foundation, Inc. They represent statements made by the authors and do not express the opinions of the abstractors or of the LTF.

Since some of the abstracts are from abstract journals, LTF cannot furnish photostats of all of the original articles. If the title is marked with an asterisk, LTF has no further information than that contained in the abstract itself. Inquiries about these items should be sent direct to the source that is named. If you want copies of U. S. Patents, write direct to the Commissioner of Patents, Washington 25, D. C. Send twenty-five cents for each patent desired. Make checks or money orders payable to "Treasurer of the U. S."

If the title of the abstract is not marked with an asterisk, LTF can supply photostats of the original article. The charge is sixty cents per page plus six cents postage. Orders from companies or individuals who are not members of LTF cannot be filled until payment is received. Orders with payment enclosed receive immediate attention.

Foreign patents may be obtained as photostats from the Library of Congress, Washington, D. C.

LTF also has mimeographed lists of (1) "Periodicals Abstracted by the Research Department" and (2) "Books of Interest to Lithographers." These are available for ten cents each in coin or U. S. stamps. Lithographic Technical Foundation, 1800 S. Prairie Ave., Chicago 16, Ill.

#### Photography, Tone and Color Correction

\*PHOTOGRAPHIC LIGHT SENSITIVE MATERIAL FOR MAKING HALFTONES. U. S. Patent 2,691,586. J. A. C. Yule and R. E. Maurer. *Official Gazette* 687, No. 2, October 12, 1954, page 393. 1. A photographic material comprising a support and a uniformly thick photosensitive silver halide emulsion layer on the support with a halftone pattern of undulating sensitivity uniformly distributed throughout the layer with the areas of lower sensitivity Clayden desensitized.

\*PRESCREENED POSTERIZING PHOTOGRAPHIC FILM. U. S. Patent 2,691,585. J. A. C. Yule and R. E. Maurer. *Official Gazette* 687, No. 2, October 12, 1954, page 393. 1. A photographic material for posterizing comprising a support and a uniformly thick photosensitive silver halide emulsion layer on the support with Clayden desensitization distributed throughout the layer in a uniform posterizing halftone pattern with at least three and not more than eight levels of different substantially uniform sensitivities, varying in any one level less than one third the difference between the sensitivities of successive levels.

\*PRESCREENED PHOTOGRAPHIC FILM EMPLOYING ALBERT REVERSAL. U. S.

Patent 2,691,583. R. E. Maurer. *Official Gazette* 687, No. 2, October 12, 1954, page 392. 1. A photographic halftone material comprising a flat support and a uniformly thick photosensitive silver halide emulsion layer on the support with a halftone pattern of Albert reversal dot areas the halftone pattern being a uniformly distributed undulating one with a sensitivity at the maximum reversed points which are called the corners of the dot areas, equal to less than one-fifth the sensitivity at the centers of the dots, produced by a process which includes exposure of the layer through a halftone screen between threshold Albert and optimum Albert exposure for all points of the dot pattern and immersing the exposed layer in a bleach bath which is non-solvent for silver halide.

\*INCREASING CONTRAST OF HALFTONE REPRODUCTIONS. U. S. Patent 2,691,580. D. J. Howe. *Official Gazette* 687, No. 2, October 12, 1954, pages 391-392. 1. The method of making a halftone record on a Clayden desensitizable silver halide photosensitive sheet material which comprises placing a halftone screen in front of the material, exposing the material through the screen twice, first to a uniform high intensity short duration exposure to Clayden desensitize the areas

behind the transparent parts of the screen and second to a continuous tone image of lower intensity and for longer duration and then developing the material.

\*TRANSFER PROCESS WITH DEVELOPMENT BY HEAT. German Patent 895,101. 895,101. E. Weyde. *Photographic Abstracts* 34, Part 2, 1954, page 72. The negative layer contains light-sensitive silver halides, one of the usual developing agents, e.g. metol and a compound which on heating liberates water or an alkaline material, e.g. urea. The image receiving layer contains a product which forms a visible reaction product with the developing agent when it is evaporated by the heat of, for instance, a ferrotype press, in the unexposed areas of the negative. A starch coating may be applied to prevent sticking together of the two sheets. Suitable positive layers contain a copper salt, methyphenylpyrazolone or sodium o-nitrosobenzoate in gelatin or polyvinyl alcohol. A photoprint of German Patents may be obtained from the U. S. Patent Office, Washington 25, D. C.

\*OPTO-ELECTRIC COLOR CORRECTION APPARATUS. U. S. Patent 2,691,917. Paul N. Curry. *Official Gazette* 687, No. 3, October 19, 1954, page 538. 1. In an electrical optical system for reproducing a color photograph, the combination: means producing a pilot beam of poly-chromatic light, the intensity of said beam being non-constant with its intensity peaks occurring at a pre-determined frequency; means providing a beam of monochromatic light of constant intensity constituting an exposing beam; an optical system gathering said beams into a single beam and directing same onto a single elemental area of a transparency and means causing said single beam to scan a plurality of elemental areas of said transparency; a light sensitive electric device; means holding light sensitive material; means directing a portion of the light passing through said transparency onto said light sensitive electric device and directing another portion of said light onto light sensitive material; a frequency responsive filter circuit operatively associated with said light sensitive electric device and adopted to transmit only output impulses therefrom of said frequency; a light valve in the path of said monochromatic beam and means including controllable and selectable means comprising a modulating section connecting the out put of said filter circuit to said light valve.

#### Planographic Printing Processes

\*PHOTOMECHANICAL RESIST. U. S. Patent 2,690,966. L. M. Minsk and W. P. Van Deusen. *Official Gazette* 687, No. 1, October 5, 1954, page 167. 1. A photomechanical resist composition comprising a polymeric material selected from the group consisting of cinnamic acid esters of polyvinyl alcohol containing at least 60 mol percent of recurring structural units having the formula

$-\text{CH}_2-\text{CH}=\text{O}-\text{CO}-\text{CH}=\text{CH}-\text{C}_6\text{H}_5$ , as a combined carrier and light-sensitive material, and as a light-sensitizing agent for the polymeric material a triphenyl-



***You wanted it better...***

***so we made it***

# **10 ways better!**

**Now, Kodalith Super Ortho Film with a new emulsion is the answer to your requests for:**

## **More development latitude**

- 1** Kodalith Super Ortho Film will yield good negatives through a long development time range for a given exposure.

## **More exposure tolerance**

- 2** You can now save wasted man-hours, because Kodalith Super Ortho has amazingly wide exposure latitude.

## **Better line reproduction**

- 3** Kodalith Super Ortho has the high resolution and full Ortho sensitivity which you need for high-quality lithographic platemaking.

## **More abrasion resistance**

- 4** Much more freedom from annoying marks caused by pre-exposure handling, pressure sensitization, and processing.

## **More safelight tolerance**

- 5** Super Ortho does not fog easily, even with doubtful safelights.

## **Clear base and emulsion transparency**

- 6** During and after development, a completely transparent non-image area makes careful visual inspection easier.

## **Blacker images**

- 7** For easier inspection and better dot etching, Kodalith Super Ortho has the image color which everyone wants.

## **Improved dot etching**

- 8** Ever have the dot gray out just at the crucial moment? Super Ortho is the answer to the demands of skilled dot etchers.

## **Fewer pinholes**

- 9** Whatever the source—handling or chemicals—you can greatly reduce pinhole miseries with Super Ortho.

## **Lies flat**

- 10** Flat is the way you get your film, and flat is the way it stays. Not a curl in a carton!

.....













**Ten ways better,** Kodalith Super Ortho Film offers you new quality, new efficiency, and a new high in satisfaction. And, as always, you can count on Kodak uniformity... every box is true to specification.

*Next time you see your Kodak Graphic Arts dealer, get a sample of the new Kodalith Super Ortho Film. You'll notice the difference immediately.*


**GRAPHIC ARTS DIVISION, EASTMAN KODAK COMPANY, Rochester 4, N. Y.**

The Kodak logo graphic consists of a stylized, dark, curved shape resembling a film strip or a corner of a frame, with the word "Kodak" in a serif font positioned within the curve.

**Kodak**

			
SPELL OUT	UPSIDE DOWN — TURN	INSERT SPACE	LESS SPACE
			
MOVE TO RIGHT	MOVE TO LEFT	RAISE	LOWER
			
ALIGN TYPE	STRAIGHTEN LINES	CHANGE BAD LETTER	3M BRAND

## Marks every printer should know

 **PROOF** of 300-line screen quality is this famous trademark that appears on every 3M Photo-Offset Plate. It means perfect reproduction every time — richer colors, deeper blacks, better solids.

"3M" Photo-Offset Plates save you money,

too. No darkroom, whirler or graining machine is required.

The big yearbook-printing season is coming up . . . with "3M" Plates you can print school annuals better, faster, more economically. Try them!



**UNAFFECTED BY TEMPERATURE** and humidity — and they won't oxidize on the press!



**DEEP-ETCH QUALITY** from a surface-coated plate; grainless aluminum makes the difference!



**DELETIONS AND ALTERATIONS** are easy; and every plate delivers perfect re-runs.

**IT'S THE ONLY BRANDED PHOTO-OFFSET PLATE ON THE MARKET!** Look for this trademark — it identifies the perfect plate for perfect printing.

**FREE DEMONSTRATION**—300-line Screen test right in your own shop! **FREE BOOKLET** on Large-Size "3M" Photo-Offset Plates! Tells all about them, how to use them. For either or both, just write: Dept. ML-124, Minnesota Mining and Mfg. Co., St. Paul 6, Minnesota.



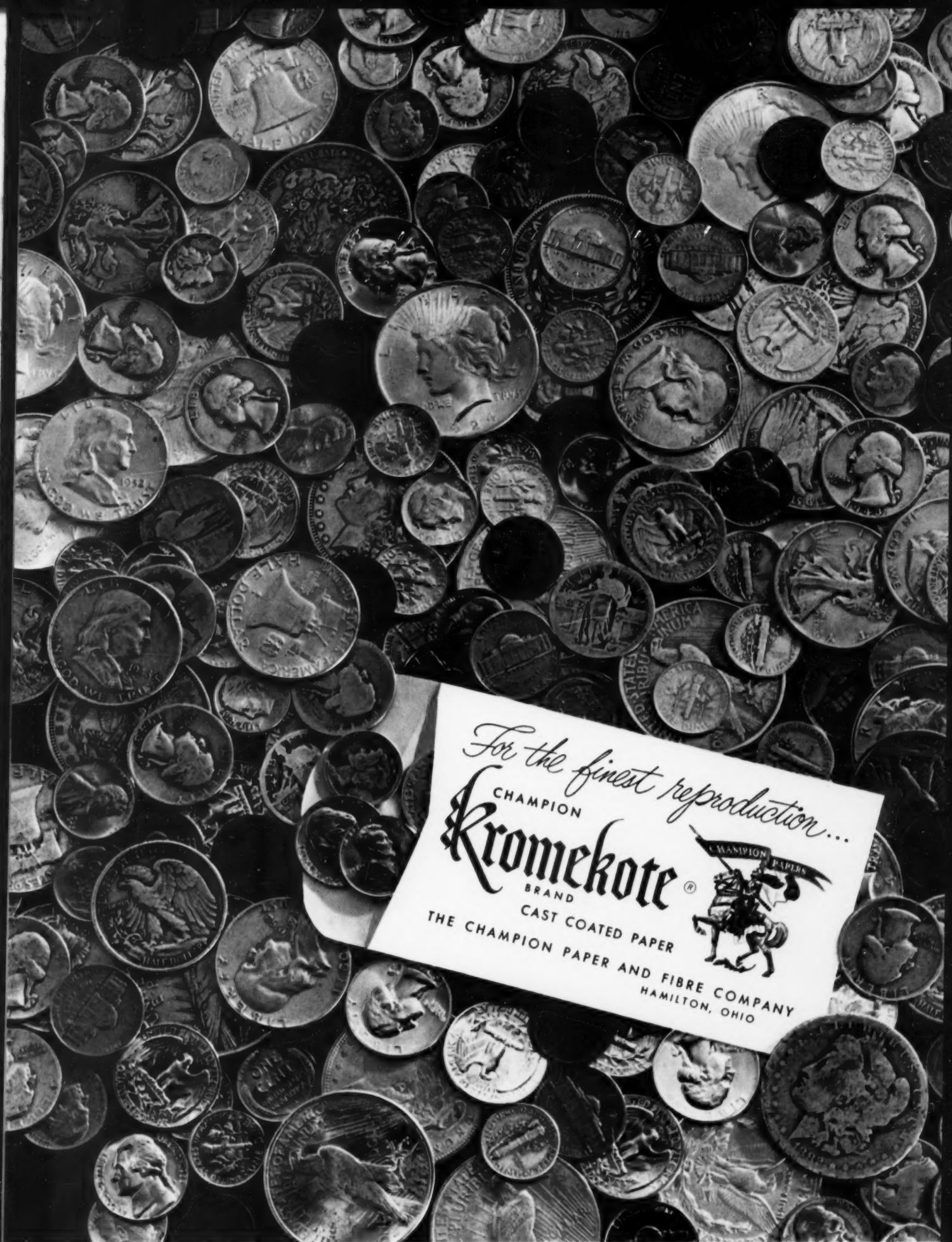
Either of these marks   identifies the 3M BRAND

## 3M Photo-Offset Plates

World's largest-selling Sensitized Aluminum Photo-Offset Plates

Made in U.S.A. by MINNESOTA MINING AND MFG. CO., St. Paul 6, Minn. — also makers of "Spherkote" Brand Tympan Covers and Frisket Papers, "Scotchlite" Reflective Sheeting, "Scotch" Brand Pressure-Sensitive Tapes, "Scotch" Brand Magnetic Tape, "Undersol" Rubberized Coating, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 122 E. 42nd St., New York 17, N. Y. In Canada: London, Ont., Can.





*For the finest reproduction...*  
CHAMPION  
**Kromekote**<sup>®</sup>  
BRAND  
CAST COATED PAPER  
THE CHAMPION PAPER AND FIBRE COMPANY  
HAMILTON, OHIO



Number Seventeen in a series of textural studies designed to show the quality of reproduction possible with fine materials



# Buy and Specify these Papers by Name

## COATED BOOK

Satin Proof Enamel  
Hingfold Enamel  
Refold Enamel  
Falcon Enamel  
Format Enamel  
Wedgwood Coated Offset  
Templar Coated Offset  
All Purpose Litho

## CAST COATED PAPER

Kromekote Enamel  
Kromekote Label  
Kromekote Litho  
Kromekote Cover  
(Cast Coated 1 Side)  
Kromekote Cover  
(Cast Coated 2 Sides)  
Kromekote Postcard  
(Cast Coated 1 Side)  
Kromekote Postcard  
(Cast Coated 2 Sides)  
Kromekote Box Wrap

## DRUM FINISHED PAPER

Colorcast Box Wrap  
Colorcast Gift Wrap  
Colorcast Label

## COATED COVER

Hingfold Coated Cover  
Refold Offset Cover

## DULL COATED BOOK

Dullofold Coated

## UNCOATED BOOK

Garamond Antique  
Garamond English Finish  
Garamond Text (W. M.)  
Wedgwood Offset  
Pasadena Offset

## UNCOATED COVER

Ariel Cover  
Cordwain Cover

## ENVELOPE PAPER

Colored Wave Envelope  
Radiant White Envelope  
Foldur Kraft Envelope  
Gray Kraft Envelope  
Suntan Kraft Envelope  
Ne'er Tear Envelope

## COATED POST CARD

Campaign Postcard

## BRISTOLS

Inventory Index  
Canton Postcard

## TAG

Tuf-Tear Tag

## BOND, MIMEOGRAPH

Ariel Bond  
Scriptic Mimeograph

## PAPERIE

Wedgwood Papeterie  
Garamond Papeterie  
(Embossed and Printed)

## PRESSBOARD

Champion Pressboard  
Imitation Pressboard

## SPECIALS

Cigarette Cup Stock  
Food Container Stock  
Coffee Bag  
Tablet Papers  
Drawing Papers  
Red Patch Stock  
Stencil Board  
Pattern Board  
End Leaf Paper

# The Champion Paper and Fibre Co.

General Office : Hamilton, Ohio

MILLS AT HAMILTON, OHIO . . . CANTON, N. C. . . PASADENA, TEXAS



For full information on how this advertisement was produced, write our Advertising Department, Hamilton, Ohio



methane dye containing at least one 4-aminophenyl group attached directly to the methane carbon atom of said dye.

**\*DIAZOTYPE PROCESSES AND MATERIALS FOR PRODUCING PHOTOMECHANICAL PRINTING PLATES.** *British Patent* 711,808 Kalle and Co., A. G. *Printing Abstracts* 9, No. 9, September, 1954, page 652. The light-sensitive constituent of a coating for aluminum foil plates consists of a water-insoluble ester or amide of a sulphonic or carboxylic and of an *o*-diazophenol (e.g., the diazo compound from 2-amino-1-hydroxyl-benzene-4-(N:N-diphenyl-sulphonamide)).

**\*DEVELOPMENT OF DIAZO AND AZIDE SENSITIZED COLLOIDS.** U. S. Patent 2,690,968. A. J. Powers, Jr. *Official Gazette* 687, No. 1, October 5, 1954, pages 167-168. 1. In the process of developing an exposed sheet of colloidal material capable of being tanned and sensitized with a compound containing the —N:N— group which compound is decomposed on exposure to light to tan the colloidal material and to lease gaseous nitrogen, said developing being done by washing with water, the improvement comprising the step of subjecting the exposed sheet to suction prior to the washing of the sheet with water, said suction being of such degree and duration as to remove the gaseous nitrogen from the colloidal material of the sheet.

**\*DIAZOTYPE PRINTING PLATES.** *German Patent* 888-204. O. Süß. *Photographic Abstracts* 34, Part 2, 1954, page 101. The synthesis of a number of diazonium compounds of *o*-quinonediazide sulpho or carboxylic acid amides and esters is described. The compounds are dissolved in a solvent boiling between 70 and 100° C., e.g. dioxane, and coated on a suitable paper support, zinc or aluminium foil. An alkali soluble resin may be added to the solution or applied as an inter-layer. After exposure, development by an alkaline solution, e.g. trisodium phosphate, and acid aftertreatment, e.g. with 1 per cent phosphoric acid, enables the unexposed areas of the plate to absorb greasy inks. The adhesion between image and plate can be improved by heating to 250° C. A photoprint of German Patents may be obtained from the U. S. Patent Office, Washington 25, D. C.

**\*PROCESSES AND MATERIAL FOR USE IN PRINTING, WITH THE APPLICATION OF DIAZO COMPOUNDS.** *British Patent* 708,834. Kalle and Co., A. G. *Printing Abstracts* 9, No. 8, August, 1954, page 592. A diazo compound is claimed as the light-sensitive constituent of a light-sensitive layer for the production of lithographic printing plates.

**\*PRINTING SURFACES.** *British Patent* 678,097. E. W. Rollinson. *Abridgement of Specifications* XVI, 1954, page 216. An aluminum planographic printing plate which may be imaged both by direct marking (by typing, or by hand with crayon, ink, etc.) and photographically, has an integral roughened surface of average topography the equivalent of 35-80 micro-

inches R.M.S. as measured by a specified form of surface analyzer, uniformly coated with anodic aluminum to a thickness of 2.4 to 3.5 milligrams per sq. in.

### Paper and Ink

**"ACID" PAPER AND INK DRYING.** R. R. Coupe. *Penrose Annual* 48, 1954, pages 113-115 and 1 plate. The author discusses the relationship between the acidity of papers and ink-drying troubles. Using the PATRA "Drying time on paper" apparatus, a series of otherwise identical papers was tested in which only the acidity was varied in the pH range of 7-4 by small additions of sulfuric acid to the pulp; a sharp increase in drying time was noted below a pH of 5 down to 4 (very acid papers). The first experiments were carried out at a R.H. of 65%, and little difference was found between the drying times on the various sulfite papers. When the experiments were repeated at 75% R.H., wide variations were found between the different papers, those of high acidity giving much higher drying times than the neutral ones. The drying times on all papers were higher at 75% than at 65% R.H., but the relative increase at the higher R.H. was much greater with the acid papers. The reason for this type of nondrying is considered to be an interference by the acid paper with the driers added to speed up oxidation drying. When the driers are adsorbed by the fibers, they do not seem to function as effectively in speeding up the oxidation as otherwise. It is known that papers of pH values below 5 are likely to cause ink-drying troubles. The papermaker should endeavor to produce paper with a pH value in the range of 4.8-5. If this ideal cannot be achieved, it is still essential that the pH should not fall below about 4.5, for below this figure drying troubles become very common, more so in lithography than in letterpress, because in the former there is always moisture present. 1 table and 2 figures. *Bulletin of the Institute of Paper Chemistry* 25, No. 1, September, 1954, pages 46-47.

**SCUFFING RESISTANCE DETERMINATIONS ON PRINTS.** *Deutsch Gesellschaft für Forschung im Graphischen Gewerbe. Fogra Bull.*, no. 3, 1954, page 6 (in German). Two tightly stretched pieces of the print to be tested are rubbed against each other under a pressure corresponding to that of a delivery pile, one piece rubbing backwards and forwards and the other rotating. The action reproduces in a few minutes the effect of an hour's transport. The conditions, including temperature and humidity, under which the test is carried out are strictly standardized. A quality scale has been drawn up. *Printing Abstracts* 9, No. 8, August, 1954, page 560.

**OFFSET PAPER CONDITIONING.** C. W. Latham. *American Printer* 135, No. 5, May, 1954, pages 32-33 and 54, 54A. The necessity for conditioning paper, types of conditioning machines, the best way to use them, and variables to be taken into consideration when calculating conditioning time are discussed. *Printing Abstracts* 9, No. 8, August, 1954, page 565.

**\*YELLOWING OF PAPER BY PRINTING INKS.** G. L. Erikson. *Inter-Society Color Council News Letter* no. 109, November, 1953, pages 3-4; no. 110, January, 1954, page 8. Reference is made to a serious problem of color change of paper under the influence of printing inks and change of over-all color, particularly with greens, purples, and blues. The change is not so apparent with yellows, oranges, and reds. Examples of sample books printed about 20 years ago and in 1953 with the same ink on the same grade of paper substantiate the findings. The grade of paper used was found to be one of the best for holding color; others show even greater color changes. The author's remarks serve to illustrate that prints on paper are not a good way of preserving color samples; the method of putting these colors in opaque form on plastics seems to be much better. In the second part of the reference, comments by R. B. Hobbs of the National Bureau of Standards and H. S. Busby are given. *Bulletin of the Institute of Paper Chemistry* 24, No. 8, April, 1954, pages 665-666. The Inter-Society Color Council News Letter is published by the ISCC, P. O. Box 155, Benjamin Franklin Station, Washington 4, D. C.

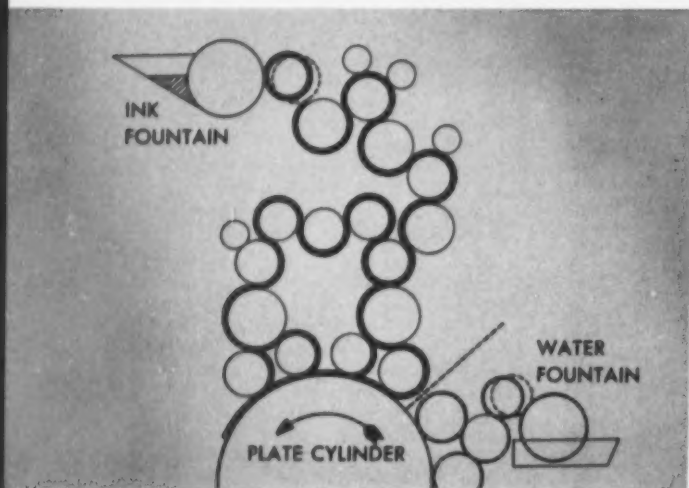
**\*PRINTING PAPER REQUIREMENTS VIEWED IN THE LIGHT OF RECENT INVESTIGATIONS.** Gösta E. Carlsson. *Allgem. Papier-Rundschau* 1954, pages 625-627, 670-674 and 714-715. The printing properties of various papers (including art paper, calendered glassine, half-tone super-calendered printing paper, and newsprint) are reviewed. The transfer of ink to paper (termed the "transference no.") as a function of amount of ink retained by the roll, of the viscosity of the ink, of speed of printing, and of the compressive stress during printing, are discussed with suitable graphs. Tests for ink and oil absorption are outlined (especially in the case of papers sized with rosin, starch, or carboxymethylcellulose), as are resistance to picking, dimensional stability, and opacity of printing paper. The significance of research in the graphic-arts field is outlined. *Chemical Abstracts* 48, No. 19, October 10, 1954, Column 11786. *Allgemeine Papier-Rundschau* is published at Frankfurt a. Main 4, Fürstenbergerstr. 175, Germany.

**\*PAPER FOR OFFSET.** A. W. Beecroft. *Paper Mill News* 77, No. 27, July 3, 1954, pages 136-137 and 139; *Paper Trade Journal* 138, No. 26, June 25, 1954, pages 66 and 69-70. The necessary qualities in paper for offset printing are discussed from the point of view of flatness and squareness of edge, picking strength, pH, ink receptivity, finishing operations (including die-cutting, embossing, folding, bronzing and varnishing), end use, and uniformity. The value to the printer of a paper testing department in the works is indicated. *Printing Abstracts* 9, No. 9, September, 1954, page 629. Paper Mill news is published by L. D. Post, Inc., 1309 Noble Street, Philadelphia 23, Penna.

**MISTING PROBLEMS IN HIGH SPEED**



Patented multi-roll inkers in a Harris two-color, 50 x 72" offset press.



**Harris Inker Design** achieves thorough ink breakup and distribution. Long train of small diameter rollers gives properly balanced flow of ink to the plate, practically eliminates ghosting and "one-turn roller streaks." Heaviest ink flow is to form rollers closest to the dampeners. This, plus the Harris vibrating system, produces a smooth, uniform film of color from front to back of plate.



**Correct Vibration** is automatic in the Harris inker. Five vibrating rollers oscillate once for every two revolutions of the printing cylinders for proper ink breakup. Each vibrator changes direction at a different time in the cycle—an absolute must for good distribution. On the larger Harris inkers, the pressman can easily adjust amount of vibration to suit a particular job, or for split-fountain work.

## Here's why the Harris inker gives you a real competitive edge

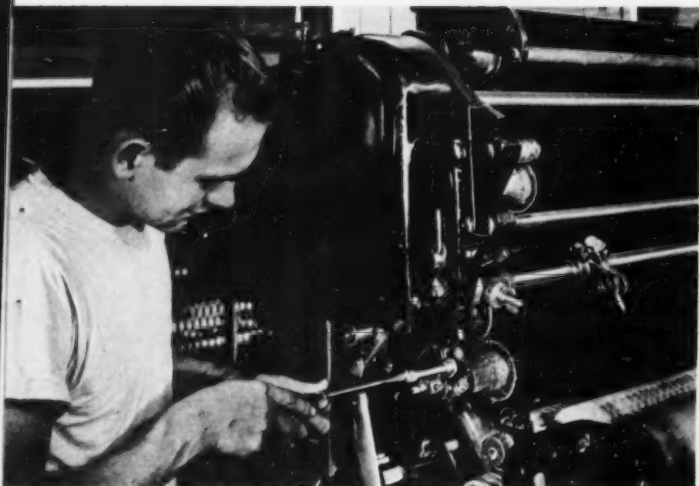
On many offset presses you still find the traditional, storage-drum type of inker. But these old-fashioned inkers can't compete in today's printing markets. Printers can no longer afford the wasted time and wasted sheets caused by ghosting, uneven color, and "one-turn roller streaks". These are all faults of the old-style inkers.

With the new Harris multi-roll inker, the old inking problems are virtually eliminated. It is an important reason why most of the lithographers who make real money in the printing business today use Harris presses.

The patented new Harris inker gives a distinct

competitive edge to the printer equipped with late-model Harris. He can figure on faster makeready and fewer wasted sheets. He can figure on less down time caused by inking troubles. He can figure on both improved quality and improved quantity of good sheets in the delivery pile. He can figure on more profit per job.

The new multi-roll inker is built into all currently made Harris offset presses. Be sure you get the full story on this exclusive Harris feature, plus the many other profit-building advantages of Harris offset presses. Check with your Harris-Seybold representative now—or just clip and mail the coupon.



**Complete Control** of the Harris inker is in the pressman's hands. He can readily adjust his settings to get a light tint or a heavy solid to meet the special requirements of each job. And with the Harris inker, once the operator makes his settings, they stay set. Automatic inker throwoff is integrated with the Harris trip system—if press is tripped, ink stops feeding and form rollers lift off plate.

### HARRIS-SEYBOLD COMPANY

4510 East 71st Street • Cleveland 5, Ohio

Press Size	No. of Color Units			
	1	2	4	5
14 x 20"				
17 x 22"				
21 x 28"				
22 x 34"				
26 x 38"				
35 x 45"				
42 x 58"				
50 x 72"				
52 x 76"				

Please send me more information on the Harris offset press model (s) checked.

Mr. \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_

State \_\_\_\_\_

*The design and manufacture of soundly engineered graphic arts equipment is the business of Harris-Seybold. Products of its divisions and subsidiaries include the leading lines of equipment for all three major printing processes—offset, letterpress and gravure.*

## HARRIS-SEYBOLD COMPANY

*fine graphic arts equipment . . . for everybody's profit*

HARRIS DIVISION • SEYBOLD DIVISION • CHEMICAL DIVISION • SPECIAL PRODUCTS DIVISION  
C. B. COTTRELL & SONS COMPANY • MACEY COMPANY • HARRIS-SEYBOLD (Canada), LIMITED



ROTARY PRINTING. Ira Williams. *American Pressman* 64, No. 11, October, 1954, pages 6, 8 and 12 (3 pages). Ink misting problems during high speed press operations are discussed. A mechanism by which the ink mist is formed is proposed. The proposed mechanism consists of four steps. 1. Combination of two ink films into one at the nip of the ink rolls. 2. Development of tension in the ink film on the separating side of the rollers' nip. 3. Cavitation of the film to form ink strings. 4. Formation of ink mist droplets when some strands rupture in more than one place. An apparatus for studying ink misting was developed. Steel ink rollers with variable surface speeds of 0 to 1500 feet per minute provide the working surface for the ink. Electrical conductivity of the ink at the nip of the rollers is measured and the mist produced is trapped and weighed. Facts learned thus far are: 1. normal ink films on single rolls remain intact even at high speeds; 2. ink film splitting must occur for misting to happen; 3. pigmentless ink vehicles also mist; 4. long vehicles mist more than short ones; 5. for a given ink a certain threshold speed must be surpassed before misting occurs; 6. electrical charges on the ink determine the amount of mist produced; and 7. elastic strain in the ink film is a factor in misting.

### Lithography—General

\*INKING AND MOISTENING MEANS FOR ROTARY PLANOGRAPHIC PRINTING MACHINES. U. S. Patent 2,689,522. Franklin E. Curtis. *Official Gazette* 686, No. 3, September 21, 1954, pages 567-568. 1. In a planographic or analogous printing machine wherein ink and a moistening solution are fed to a master in a machine to enable reproductions of an image on the master to be effected, a fountain into which ink may be introduced, a fountain into which a moistening solution may be introduced, at least one roller engageable with the master, a roller effective to pick up ink from the fountain therefor, another roller effective to pick up moistening solution from the fountain therefor, roller means for transferring ink to said at least one roller from the roller effective to pick up ink from said ink fountain, other roller means each slidably mounted in a pair of guide slots for transferring moistening solution to said one roller from the roller effective to pick up moistening solution from the fountain therefor, and means for regulating the pressure of at least selected of the rollers one on the other in the roller means effective to transfer moistening solution to said at least one roller to thereby regulate the amount of moistening solution withdrawn from the fountain therefor, said last-named means including pressure pins in said guide slots adapted to adjust the lower of said rollers slidably mounted therein, and adjusting screws having ends engaging the lower ends of said pressure pins, the engaging ends of said pressure pins and said adjusting screws being tapered to permit, through adjustment of said screws, selective movement of the pressure pins relative to said lower roller.

HOW THEY DO IT ON STONE. *Modern Lithography* 22, No. 5, May, 1954, pages 42-45 (2 pages). George Miller, New York lithographer whose whole operation still is centered around hand stone presses, has outlined highlights of the step-by-step process for preparing a stone and printing with it.

\*MOISTENING DEVICE FOR THE PLATE CYLINDERS OF PRINTING PRESSES. U. S. Patent 2,689,523. Werner Koch. *Official Gazette* 686, No. 3, September 21, 1954, page 568. 1. In a moistening device for moistening the plate cylinders in printing machines, a plate cylinder, a liquid receptacle, a hollow cylinder revolable in said receptacle adjacent said plate cylinder about an axis parallel to the axis of said plate cylinder and with its lower part submerged in the liquid, radial perforations in the wall of the said cylinder of a kind to take up from the receptacle dabs of liquid and to carry them around during the revolution of the said cylinder, a take-up roll for spreading the liquid over said plate cylinder adjacent its inner wall and delivering directly through the said perforations to thereby blow the said dabs of liquid against the plate cylinder, an adjustable shield for screening off parts of the ejected liquid, a spring-controlled two arm level pivoted to the axle of said cylinder carrying said shield upon one of its arms and a bearing surface for cooperation with an adjusting member on the other, and means for adjusting said cylinder together with its nozzle and screening device in relation to the said plate cylinder independently of the said liquid receptacle.

### Graphic Arts—General

\*PRINTING PROCESSES. *British Patent* 679-974. W. C. Huebner. *Abridgement of Specifications* XVI, 1954, page 227. An image is reproduced on a sheet by depositing material from a smoke atmosphere, derived from products of combustion, in an electrostatic field having the configuration of the image to be reproduced.

\*COMBUSTION PRECIPITRONIC PROCESS AND APPARATUS. U. S. Patent 2,691,345. W. C. Huebner. *Official Gazette* 687, No. 2, October 12, 1954, pages 324-325. 1. The method of producing an image upon image receiving material which comprises creating an electrostatic field of force extending through the said material with the lines of force of said field arranged in accordance with the configuration of the image to be produced, creating smoke by combustion of a smoke producing substance at a region remote from said field of force, and conducting the smoke into the region of influence of said field of force adjacent that surface of the said material on which the image is to be produced while the material is in said field, thereby causing the solid particles of said smoke to be deposited upon the image receiving material by the said lines of force. 7. An apparatus for repeatedly producing an image upon a web of image receiving material comprising a housing having an

opening in one side thereof, a hollow rotatable image cylinder supported adjacent said housing with a portion of the surface of said cylinder positioned within said opening and substantially closing the latter, the surface of the cylinder including conductive image portions and non-conductive portions representing non-image areas, electrode means stationarily supported within said cylinder, electrode means supported in said housing adjacent the surface of said cylinder but spaced therefrom, means for causing the image receiving material to move in timed relationship with said cylinder in a path extending between the surface of said cylinder and the said electrode means within said housing when the said cylinder is rotated, means for creating products of combustion in communication with said housing for providing an atmosphere of said products in the form of smoke in said housing, and means for supplying electrical energy of opposite polarity to said electrode means for creating an electrostatic field of force there between through which the web material and the surface of said cylinder move whereby the image is progressively sequentially formed by the depositing of opaque smoke components upon the moving material under the influence of the said electrostatic field the lines of force of which are sequentially arranged in accordance with successive portions of such image by the passage of the said conductive and nonconductive portions of said surface through the said field.

\*PHOTOCOMPOSING MACHINE. U. S. Patent 2,691,924. James C. Plastaras. *Official Gazette* 687, No. 3, October 19, 1954, pages 540-1. 1. In a photocomposing machine of the class described, wherein a composed line of matrices bearing photographically reproducible characters is delivered and justified between a pair of line clamping jaws during each machine cycle of operation, the combination of an extensible camera arranged to photograph the justified matrix line, said camera including a head, a lens carrier and a film holder detachably secured to the camera head, a rotatably adjustable drum provided with two sets of stop elements whereby the camera may be set in different focusing positions, film feed mechanism capable of adjustment for different line spacing, adjustable means for limiting the area of the film to be exposed under the different camera settings, and a single rotatably adjustable control dial appropriately labeled and operable at will to simultaneously effect the adjustments of the focusing stop drum, film feed mechanism and the means for limiting the area of the film to be exposed.

THE SENSITOMETRY OF CONTINUOUS TONE XEROGRAPHY. W. E. Bixby, P. G. Andrus and L. E. Walkup. *Photographic Engineering* 5, No. 3, 1954, pages 195-201 (7 pages). In 1948, the first general announcement was made of the dry photographic process called "electrophotography" or "xerography." While good-

(Continued on Page 105)





"WINTER GLOW"

BY SARMA MAURER



## *Even a White Christmas...*

Even a White Christmas is alive with color. And we pause briefly  
to say that the makers of HOWARD colors wish you, your  
friends, and your family a joyous Yuletide and a happy '55.

# Howard Bond

"The Nation's

Business Paper"

Companion Lines: Howard Ledger • Howard Mimeograph

Howard Writing • Howard Posting Ledger





*Doesn't color reproduce better on Maxwell Offset?*

Howard Paper Mills, Inc. / MAXWELL PAPER COMPANY DIVISION / Franklin, Ohio

We'd be pleased to send you samples of our seven finishes and two tints

COLOR PHOTOGRAPH BY ANTON BRUEHL





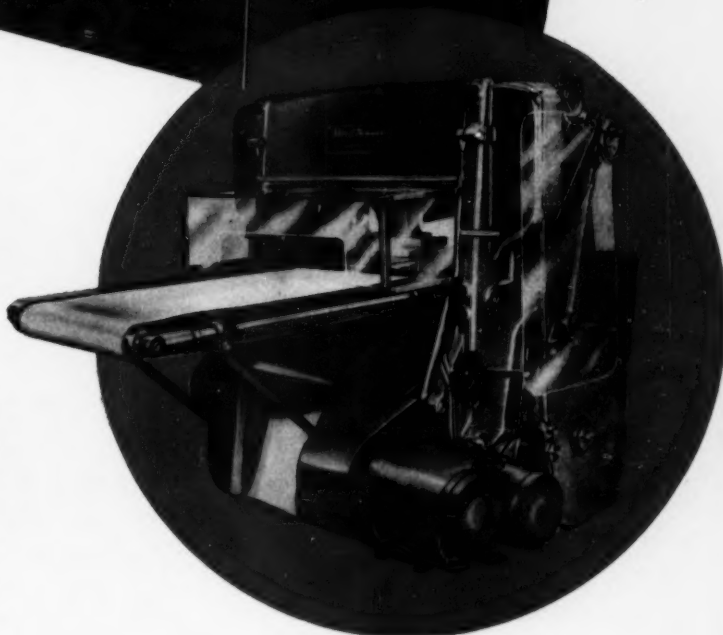
## "the **LAWSON** *three-knife* **RAPID TRIMMER**

increased our production **300**  
it now takes **7½** hours to do  
what formerly took **30** hours".

Says Mr. H. W. LINES, Production Manager  
Wartburg Press, Columbus, Ohio.

We quote Mr. Limes — "I am writing this to inform you of my extreme satisfaction with your three-knife Rapid-trimmer. I don't know how we ever got along without it.

We have a weekly periodical with a circulation which varies between 99,000 and 100,000 copies. Prior to the installation of the three-knife trimmer we were using up to 30 hours of machine time to trim this periodical. Now we do it in 7½ machine hours. For further comparison, we trimmed some 30,000 booklets which were just above the minimum size of this machine, which required a complete changeover, in 3½ hours."



Size Range: 2" x 3¼" to 11¾" x 16¾"  
Production: 10 to 25 piles per minute.  
Will also trim books bound 2-up.

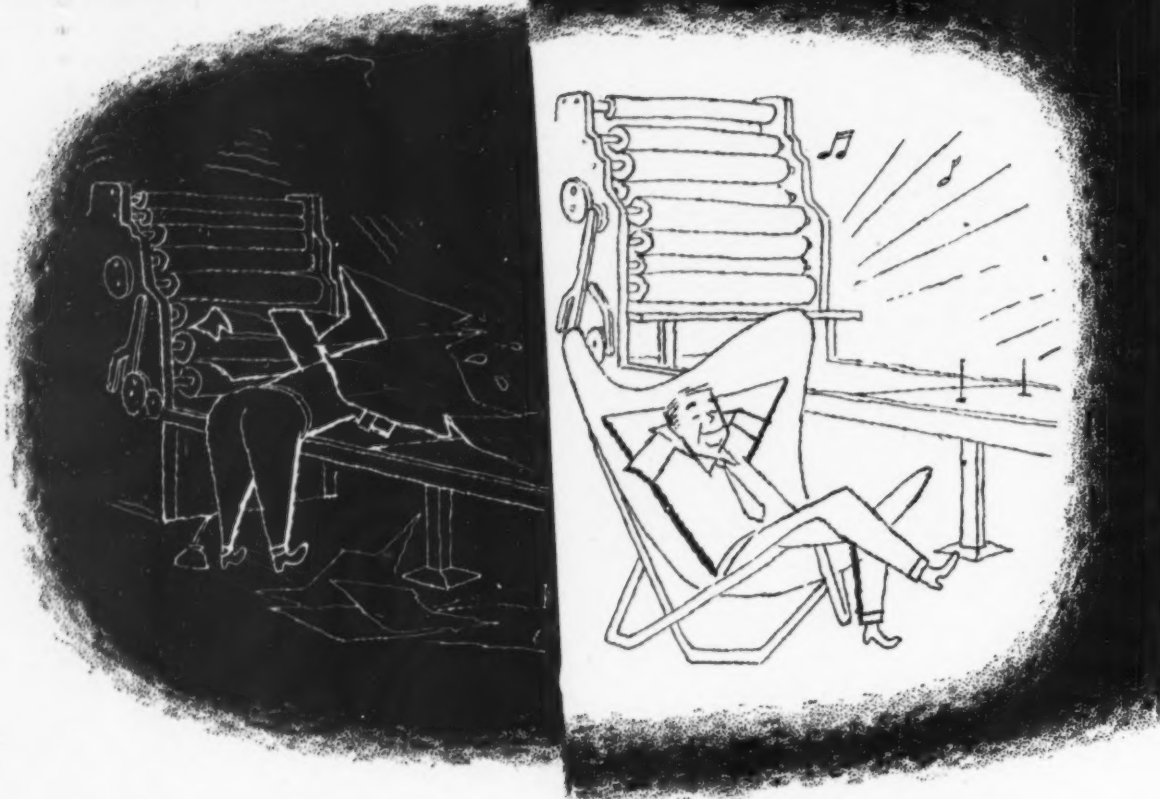
Ask for descriptive details also on Lawson  
39" - 46" - 52" Cutters.

**E. P. LAWSON CO.** main office: 426 WEST 33rd ST., NEW YORK 1.  
CHICAGO: 628 SO. DEARBORN ST. BOSTON: 176 FEDERAL ST. PHILADELPHIA: BOURSE BUILDING

### EXCLUSIVE DISTRIBUTORS SALES AND SERVICE

HARRY W. BRINTNALL CO. Los Angeles, San Francisco A. E. HEINSOHN PRINTING MACHINERY Denver SEARS LIMITED Toronto, Montreal, Winnipeg, Vancouver  
SOUTHEASTERN PRINTERS SUPPLY CO. Atlanta WESTERN NEWSPAPER UNION Tulsa, Little Rock, Okla. City, Shreveport E. C. PALMER & CO. Dallas, Houston, New Orleans

CHANGE FROM THIS... TO THIS...



Put the job on  
NEW, BRIGHTER WHITE  
**WESTON BOND**

25% RAG CONTENT

*Jobs that go smoothly go profitably!*

When you recommend and use new WESTON BOND, the job goes smoothly all the way down the line.

Selling goes easier because customers know and respect the name Weston. They'll be pleased to know that Weston, a great name in fine paper, makes a 25% rag content bond.

Printing goes better because new WESTON BOND prints better and handles easier right through the shop. That means faster runs, cleaner runs, trouble free runs . . .

in short, less lost time and more profit for you.

And new WESTON BOND serves your customers better, makes their letterheads and forms look and act like more for the money. They come back again and again for more of that good WESTON BOND.

Your Weston merchant has it in a complete selection of sizes, weights and colors, plus Weston Opaque Bond, Weston Bond-Litho Finish and envelopes to match with instant sealing flap gum.



**BYRON WESTON COMPANY**

*Makers of Papers for Business Records since 1863*

**DALTON, MASSACHUSETTS**



## THROUGH THE Glass

**"BELLE OF THE BALL"** might well be the word for a job the Veritone Co., Chicago, executed as a "party favor" or keepsake for the Artists' Equity ball held in Chicago recently. Unique distinctions of the piece came to light when it won a Merit Award in October, in the 22nd annual competition and exhibition of advertising and Editorial art, sponsored by the Art Directors' Club of Chicago.

Entitled "Improvisations—1954," the piece was entered in the "Direct Mail—Booklets" category, but that seems to be stretching a point. The "booklet" of 36 pages, is 19 x 25 inches in size, half an inch thick and plastic bound on the short side. Because of its proportions both hands, your knees or something, are required to hold this "booklet" open, if you attempt to hold it at all.

Aside from that the "booklet" has attracted wide attention in art and lithographic circles because in its production the Veritone Co. went way back to the day when Senefelder discovered a new printing process.

Only, in this case, instead of drawing the designs with crayon on stone, the artists drew them directly on grained zinc plates. These were placed on the press and run.

Each of the 36 huge pages was designed by a different artist who used a black wax crayon and tusché in sketching his picture on the metal. Getting along without photography in today's photo-lithographic world was quite a venture, Gordon B. Stephenson, production manager for Veritone, admitted, and considerable experimentation was done before everybody was happy over results.

He passed it all off lightly, saying simply, "It's almost the same way Senefelder would have done it." What pleased him and Veritone's president, Verne Evens, most, was the fact that, as he expressed it, "We got tonal values that it is not possible to get with halftone screens."

The stunt wouldn't be very practical, Mr. Stephenson agreed, if large runs were involved. This one was for

1,000 copies. In the club files are letters from President Eisenhower and Sir Winston Churchill, expressing their interest in the presentation copies sent them. Chicagoans saw the "booklet" in the display of all award winners hung in Diana Court Building on upper Michigan Avenue, in November.

Aside from this super-king-size "booklet," lithography did not get much attention in the competition. First place award in the direct mail class went to a Christmas card, printed by the artist on a private press. In the Poster class only a few entries were received and no award was made because, as the judge realistically explained, "They weren't worth it."

ml

Chicago graphic arts groups have been experiencing an "epidemic" of sorts, which impels them to forsake the conventional monthly supper meeting and tramp around



in other people's plants. The Chicago Lithographic Institute's apprentice training course students do it on a regular basis around town and occasionally they board a train for Rochester, N. Y., or some of the paper mills in northern Wisconsin. Lately various local clubs have gone into the field trip ritual in a big way, first victim of the "disease" being the Chicago Litho Club which, on Oct. 27, toured Continental Can Co.'s largest metal decorating establishment in a body.

Not to be outdone by anybody, the Chicago Supplymen's Guild took in the Vandercook & Son plant, Nov. 3. Following suit, the Craftsmen, on Nov. 16, took the big Miehle Printing Press & Mfg. Co. factory by storm.

This "go-look-see" disease, if it could be called that, is all to the good for all hands. Despite the "hardship" of walking instead of just sitting through a meeting, everybody contrives to have himself a good time and maybe he learns something helpful to boot.

Most companies, too, of course, don't mind. At Miehle's though, in spite of adequate advance warning, there were a few anxious moments spent in checking up to make sure that no straggling Craftsman got locked in the big, sprawling building at second shift quitting time.

ml

Fred W. Danner, president of Danner Press, Akron, Ohio, was re-elected to the Ohio state senate for his third term in last month's election. He is a Republican and won in a "heavy Democratic industrial area," his company reports.

ml

Bob Emslie, secretary of the National Assn. of Photo-Lithographers,

New York, currently is heading a New York state drive to raise \$750,000 for the Masonic Brotherhood Fund for a new medical research cen-

ter in Utica, N. Y. Mr. Emslie met with Governor Dewey, November 24, and made several recordings for use in the fund campaign.★★

## Industry Refutes Newspaper Criticism of P-O-P

**A**NOTHER frontal attack on lithography — directed this time at point-of-purchase advertising — brought strong and rapid rebuttals last month from industry members.

A front-page article in the *Journal of Commerce* of Sept. 28, terming point-of-sale advertising "a billion-dollar waste" started the controversy. The Point-of-Purchase Advertising Institute, a trade association official and a prominent union official were quick to defend this form of advertising.

Key paragraph in the long *Journal* account was this:

"But as usual, well over 75 per cent of such expenditures (for point-of-sale advertising) will go down the cost-of-selling drain. To put it bluntly, few big-volume outlets will use the 'helps'; and in those few, the 'helps' will not help sales."

It went on to quote "one of the crusading lithographers" as saying of other members of his trade: "They specialize in making pretty cardboard

pictures designed for sale in maximum quantities; and, as an afterthought, for possible use in thousands of unclassified and unsolicited retail outlets."

POPAI came back with an item-by-item challenge to each of the main points of the article. This rebuttal was printed in full by the *Journal* in its Oct. 22 issue. POPAI declared that waste was greatly overestimated by the newspaper's writer and that many companies have come out strongly for this form of advertising.

H. C. Latimer, executive director of Metropolitan Lithographers Association, Inc., in a letter to the paper, made a similar rebuttal. He stated that "any advertising medium can be used unwisely. All are to some extent. But the blame is on the heads of the planners and research and advertising men, not on the medium. Display lithographers, by and large, are doing an intelligent job."

The trade union leader asserted that the *Journal* writer had set out to destroy an idea in advertising which he said is doing much to publicize the industry and its ability to sell. Like Mr. Latimer, he attacked the statement that display lithographers maintained "sucker" lists.

Almost everyone who commented on the situation stressed the point that it is virtually impossible to determine the exact value of point-of-sale advertising, as it is in most other media.

Most saw in the article another challenge to the ability and reputation of the litho industry, which has been unfairly criticized in the past on numerous occasions. One lithographer declared that "each time the industry is criticized, we come out stronger, with our reputation higher." He added that it is up to the offset trade to publicize the value of point-of-purchase advertising to illustrate to advertisers and the public the part it plays in marketing.

## Dively Rides Jet

Rigged out in a jet pilot's helmet, oxygen equipment, parachute and flight suit, George S. Dively, chairman and president of Harris-Seybold Co., Cleveland, is shown receiving last minute instructions before climbing aboard a 600 mph two-seater jet airplane at Elgin Air Force Base, Florida. Mr. Dively was one of a group of U.S. business and civic leaders who were recently guests of the Defense Department on an eight-day tour of Army, Navy, Air Force and Marine bases. The program, initiated by Defense Secretary Charles E. Wilson, is known as the Joint Civilian Orientation Course.



# Metal Decorating

## Vinyl Coatings in Metal Decorating

**A**S WE all know, vinyl coatings are not new and recent years have seen many improvements in the metal decorating field. The properties inherent in the original vinyls were freedom from flavor and odor, which made them eagerly and favorably acceptable to the food and beverage industry.

In addition, this type of coating has excellent forming or fabrication ranging from a simple fabrication found in the general closure to severe deep drawing. In some cases draws of six inches or more have been highly successful.

The vinyl vehicles are capable of a wide range of pigmentation and production of transparent colors. As we know, in baking there is only solvent evaporation. Because of this there is no polymerization or oxidation involved.

The vinyls as a class possess good aging properties on plate prior to fabrication and on the fabricated article. They also possess excellent dry heat aging and have not resulted in crazing or peeling in the carton.

At the beginning of commercial use of vinyls, the modifications of this class, to upgrade them in any direction, were limited. Of course the improvements that were indicated after they were accepted as a class in the metal decorating industry were,

*By A. C. Schultz*

Stoner-Mudge, Inc.  
Pittsburgh, Pa.

*A paper presented at the annual meeting  
of the National Metal Decorators Assn.,  
Atlantic City, October, 1954.*

to a significant degree, concerned with baking and because the general adhesion was improved with higher oven temperatures, the upper limit was very critical because of the thermal decomposition of vinyl resin. At that time baking cycles in the order of 15 minutes peak were generally used.

The early vinyls were not wicket mark resistant and except in very rare instances a vinyl system could not be applied to both sides of the sheet and even the application of a double or triple coat vinyl system on one side was extremely touchy, requiring utmost care and control in the coating room.

Another inherent drawback in the early days of vinyls was the lack of process resistance although a mild degree of pasteurization and sterilization could be had.

The vinyls that we have discussed so far were not only thermoplastic but were not as scratch and mar resistant as would be preferred for many applications where they would otherwise be ideal.

Within recent years vinyls have been modified. We at Stoner-Mudge have chosen one particular type of modification that we will describe as thermosetting vinyls. This class has overcome many of the deficiencies present in the early normal vinyls. First of all, in the coating room they permit the application of a system on both sides of the plate without fear of wicket marking. Double and triple coat vinyl systems can be applied without fear of marring the reverse side of the sheet. Perhaps we had better mention that insofar as the wicket mark resistance is concerned, this is definitely applicable to the normal weights of plate used in the industry. There may be times where abnormally heavy plate is required and where light or pastel colors are concerned. Extreme caution must be exercised to bake the heavier sheets so that they are not marred or scratched by the wickets.

This class of vinyl coating can be baked at temperatures far in excess of those used several years ago. The vehicle of itself can be baked at temperatures far in excess of 400°F., on such metal surfaces as blackplate and up to 400°F. on tinplate without fear of thermal decomposition. These higher baking temperatures result in a tighter cure and therefore the ability to overcoat a thermosetting vinyl



# St. Nick gets away with it...

Old St. Nick gets away with riding that antique sleigh every Christmas Eve, and it still covers the territory just as well as ever, the young folks tell us.

But you can't get away with operating a metal decorating plant using age-old equipment unadapted for modern needs.

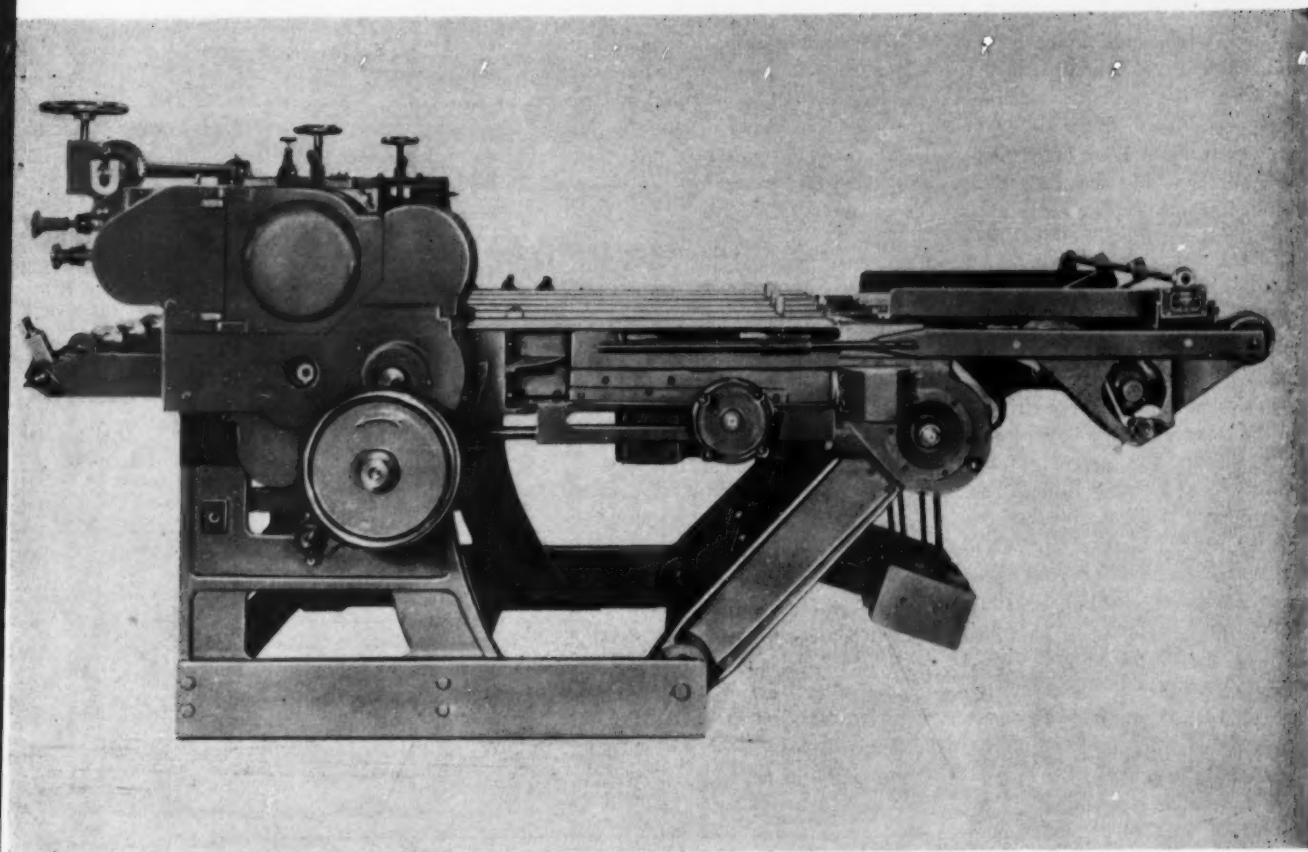


Why not profit from experience? Equip your plant with the finest up-to-date Wagner machinery to turn out your jobs with speed, quality and efficiency. (See opposite page) Call in a Wagner engineer to get all the details on how your plant can be modernized.

This service is offered without obligation.

***When thinking of Progress—think of Wagner***





*The New Wagner Model K Lug Type Spot Coater—  
With Three Register Fingers. (Designed for use  
with automatic feeder or Wagner press delivery.)*

The Wagner line includes: ROTARY-AIR OVENS, D. E. F. OVENS, AUTOMATIC STRIPPERS, SPOT COATERS, VARNISHING MACHINES, AUTOMATIC FEEDERS, ROLLER REVOLVING MACHINES, LABORATORY COATERS, SYNCHRONIZING DRIVES, AND OTHER SPECIALIZED EQUIPMENT FOR COMPLETE LINES

## WAGNER LITHO MACHINERY

Metal Decorating Machinery

Harborside Terminal, Unit 3, 34 Exchange Place, Jersey City, N. J.



*Division*

with another of this type without unsightly flow marks. The advent of higher temperatures for this class of vinyl also has permitted reduction of baking times.

It wasn't too long ago that peak baking times were in the order of 15 minutes. Today, while 10 minute peak bakes are standard, there is a definite tendency, as you all know, to reduce this bake time. In some instances peak times in the order of five to seven minutes are being mentioned, although this may be a little too short for most tinplate operations.

The thermosetting vinyl with the higher bake is tougher and much more scratch and mar resistant. This is evidenced by much less thermoplasticity while the sheet is hot, thus virtually eliminating scratching and marring when the sheets are stripped from the oven and there is very little if any tendency for the coated plate to show tack or to block in the stack. We of course all recognize that a "slick" can be added as an aid to ultimate fabrication. This is added insurance against blocking.

While this type of vinyl modification has been chosen by Stoner-Mudge, such other types of vehicles as alkyds, epoxies and phenolics, have been modified with vinyl resin. This has generally resulted in the upgrading of the resin so modified by the addition of relatively minor quantities of vinyl. This results in improved fabrication, dry heat resistance, product resistance, etc.

We need have no fear that further development in the field of vinyls is impossible. Further upgrading of the vinyl itself or as an additive to other vehicles is definitely in the cards.

With further comment on the thermosetting vinyls in addition to their wide acceptance in the closure field, definite inroads have been made into the field of metal decorating for such applications as general line cans, closures, housewares, toys and novelties. In this field where little or no processing is involved, much blackplate is used and the adhesion of the thermosetting vinyl system on blackplate is even better than we find on tinplate. The inherent forming properties of vinyls along with the vastly

improved adhesion for these applications often permits the elimination of a sizing operation without any sacrifice to the ultimate system. As you all know, the mere elimination of the sizing operation of itself is not too important but the cost of the operation is certainly significant.

With tinplate gaining wider use in the general line field, particularly for products containing essential oils, the thermosetting vinyls possess the necessary product resistance and easily withstand the severe forming that is encountered.

Flatted pigmented thermosetting vinyl coatings have gained definite favor in certain houseware lines, such as trays and baskets, etc. This has been particularly true when the applicator recognizes the need for extra care in handling flatted coatings. This system appears to be gaining favor in a field where vinyls as a class were considered too costly or more like using a "Cadillac" where a "Ford" is all that is required.

The excellent dry heat aging of both fabricated and unfabricated plate coated with thermosetting vinyls has met many requirements where severe draws are encountered, particularly in the field of toys and novelties. They have been consistently successful on such applications as the scaled down appliances and dishes that are so popular with many of your little daughters.

Many of you know first-hand that the thermosetting vinyl system possesses excellent process resistance on both cans and closures. Where severe conditions exist from the standpoint of either the actual fabrication encountered or subsequent processing cycles, a thermosetting vinyl size is suggested. However, where careful and controlled laboratory testing has been done and this same care carried over to the application of the coatings, considerable success has been had by the elimination of size on many applications. However, sizing is definitely suggested for the smaller C.T. caps, that is 20 mm. and smaller. As previously mentioned where processing, sterilization and pasteurization are not encountered, a size is very seldom required.

Where printing or decoration is involved, the thermosetting vinyl is an excellent dry ink varnish, especially where processing will be encountered. However, the old reliable normal vinyl still is very good where general line applications are involved.

About the only place where this class of vinyls has not been completely developed is in the field of wet ink varnishing. To date we are handicapped by the solvents required for vinyl resins and their effect on the printing ink vehicles.

This matter, however, is generally encouraging in view of the commercial availability of vinyl resins requiring very little if any ketone solvents, coupled with the intensified activity by the manufacturers of printing inks to develop vehicles that may be used with this type of coating and hold the color at the higher baking temperatures involved.

However, where solid prints are involved, that is all white or red, a varnish is very seldom required.

The matter of "special orders" is the plague of American industry, be it automobiles, appliances or the field that we have chosen. In a sincere effort to overcome some of the headaches involved where special orders require "short runs" or "decorator's colors," a series of mass tone tinting lacquers have been made available. By using these as mass tone coatings or tinting in a base white, the latter being part and parcel of our coating industry where conventional coatings are concerned, the litho man can now make up any quantity of a given color, saving much time that would be consumed by having his supplier "color match." He can now make up less than commercial quantities of tinted coatings in his own plant. This procedure also involves the savings of price premiums or surcharges that are so often necessary to cover the costs that mount so rapidly in filling such small volume special orders.

With the experience gained over the years in mixing inks, as well as other types of coatings, it is relatively easy for a company to work up several tints within each color class, thus enabling them to sell their cus-

tomers on what can be made up now. "Optionitis" is a "headache." The automobile salesmen are particularly aware of this because they can sit on a shop full of cars and see each prospective buyer request something just a little different requiring a special order resulting in dead inventory of existing stock and usually loss of one order or another.

We have already seen the benefits gained from this approach and now you can offer the thermosetting vinyl system for small orders and go a long way toward selling the colors that you can make up, eliminating delays encountered when a rush or special is required.

We mentioned the modification of other vehicles with vinyls and vice-versa. While basically this is not new the availability of new and improved

resins in recent years, even recent months, is resulting in coatings that have possessed all the required properties for the job and yet are lacking in ultimate fabrication or scratch resistance due to insufficient film thickness. These modifications are helping to solve many of these problems.

While we have been consistent in discussing vinyls this year as before, we want to say in closing that our activity from the standpoint of availability of other coatings, basic research and development does not stop here. Much time has and is being devoted to all classes of resins that may have application in the field of metal decorating. This includes work with resins that are commercially available and with resins that are developed within our own research laboratories.★★

## J. L. Clark Mfg. Co. Observes 50th Year

**J.** L. CLARK Manufacturing Co., Rockford, Ill. metal lithographing concern, this year is observing the 50th anniversary of its founding in 1904. The company, which today employs 1,000 men and women in the manufacture of some 2,500 different metal containers and other items, began as a manufacturer of a novel flue stopper. Tin ointment boxes, flour sifters and toasters were added to the line, and later on the company installed lithographing equipment for decorating its items.

Such items as Johnson & Johnson products, Scotch tape dispensers and containers, Ray-O-Vac battery cases, aspirin and other medical boxes, dishes, trays, hardware item containers, and others are included in the Clark company's diversified line.

The company was founded by John L. Clark. L. Harold Clark directed the firm until his death in 1953. Today, Ralph C. Rosecrance is president, William R. Franklin is vice president and H. C. Gregory is secretary and treasurer. Harold W. Lee is supervisor of the lithographing division.

From the company's original building occupied in 1904, it moved into its own building in 1910 which pro-

vided for manufacturing operations all on one level. Several additions to this plant have been added, and in 1925 the Clark tower was built. This has become a landmark, and is reproduced on company letterheads and other literature. It is 86 feet high. Branch plants were opened in neighboring communities, and the addition of a large fabricating division, followed by a new one-story office building in 1954, brought the total floor space to about 330,000 square feet.

To mark its 50th anniversary the Clark company issued an offset brochure picturing various officials, executives and employees of the firm, as well as various buildings and departments. It also produced a tray which carried a reproduction of the front page of the Rockford Daily Register-Gazette of Nov. 11, 1904, which carried a small item about the company's founding.

### Inland Steel Honored

Inland Steel Container Corp., Chicago metal decorating firm, was one of two Chicago industrial concerns honored for "outstanding achievement" in the 1954 Community Fund drive. Per capita given by Inland's

employees was boosted to \$7.53 this year, from last year's figure of \$3.56, according to Thomas Wallace, personnel manager and campaign director for the Inland plant.

### Metal Firm to Build

Croname, Inc., Chicago metal decorators, are considering plans for construction of a new plant, L. R. Gasper, president, announced in October. Definite decision on details was awaiting estimates of cost, following completion of architectural drawings, he said. It will be located on a 20-acre site owned by the firm at Touhy and Central Avenues, in suburban Skokie, northwest of Chicago, and will probably be a one and two-story structure with about 250,000 sq. ft. of floor space for office and factory operations.

Croname, Inc., which has been in business 51 years, makes name plates and metal signs and a complete line of other decorated metal products. Lithography is used for the initial steps in production of etched name plates and for straight lithographing of other items. Varied products are also processed by embossing, stamping, plating and enameling. When final fabrication is completed all products are sold direct to consumers under the Croname brand name. Sales are made chiefly to manufacturers of automobiles, refrigerators and electronic equipment, Mr. Gasper said.

### Crews Leaves Bingham

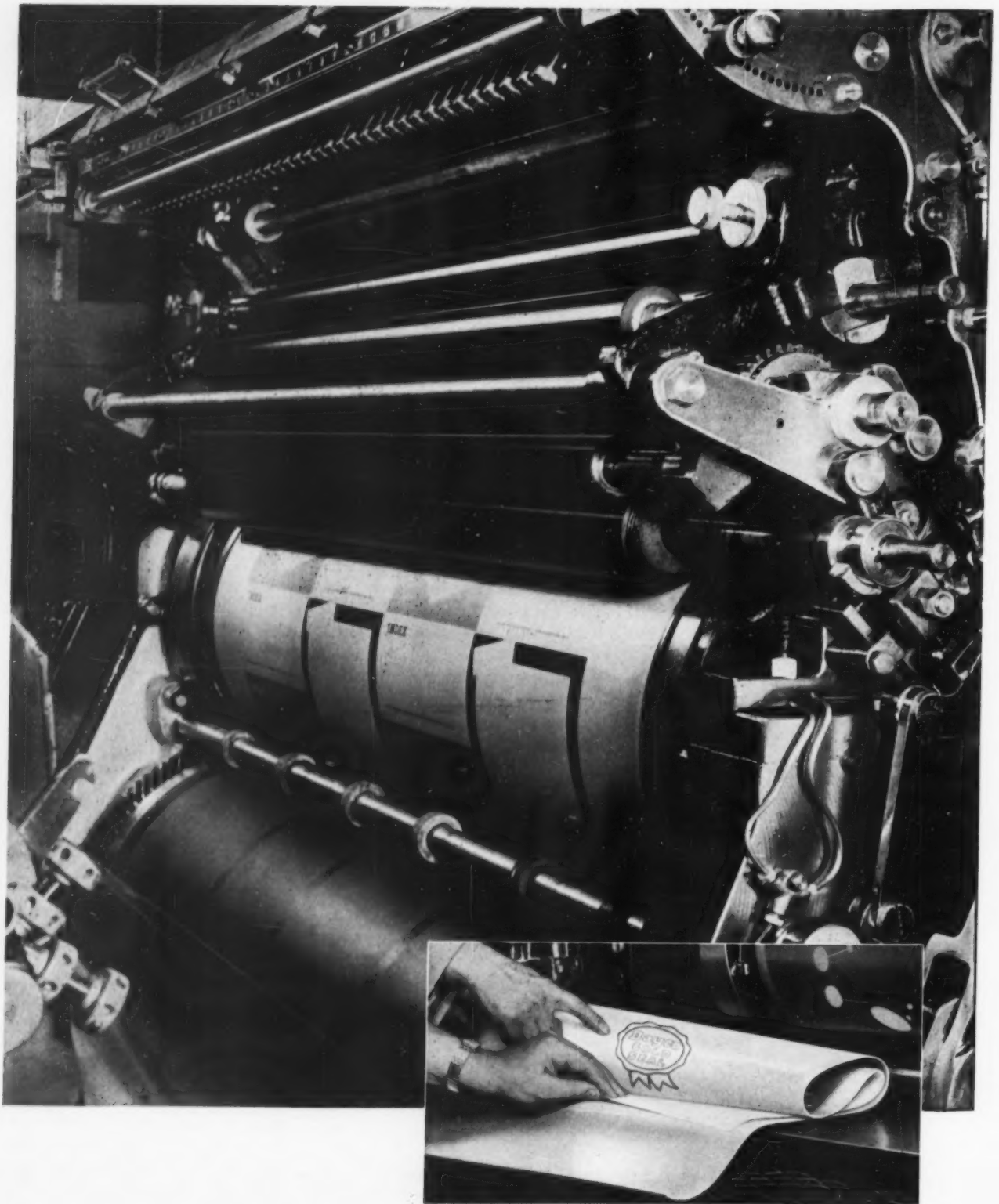
Don Crews has resigned as vice president of Samuel Bingham's Son Mfg. Co., Chicago, and left early in October for Denver, Colo., where he will make his home. Mr. Crews had been associated with the company for over 22 years in various capacities, including production manager and director of advertising. At his former office it was understood that he planned to retire from further business activities.

### Offers Oven Folder

A folder describing its industrial ovens has been issued by Michigan Oven Co., 415 Brainard, Detroit 1.



# Make every sheet count





# ...with Dayco Gold Seal Offset Blankets

More and more, Press Foremen and Sales Managers agree

Dayco Gold Seal Blankets mean better craftsmanship . . . more repeat sales.

The Dayco Gold Seal Offset Blanket is the result of many years of painstaking, meticulous research, followed by costly controlled laboratory testing to give you the finest blanket available on the market. That's why this amazing offset blanket is being used with tremendous success by offset printers throughout the country.

Its flawlessly smooth surface, consisting of synthetic rubber in uniform thickness, has a more resilient face that transfers images of intricate detail with absolute fidelity. You get a "full count" in every run because sheet after sheet is perfectly reproduced—job after job. Thus, costly waste is eliminated, enabling you to sell at a more competitive price.

The Dayco Gold Seal Offset Blanket is the master of halftones, solids, line drawings and the finest type which are faithfully portrayed sharply and clearly. Better recovery after "blanket mash" makes possible new perfection in dot and image—regardless of speed or length of run. You can expect, and get, perfect color register every time because blanket stretch is reduced to less than 2%.

You make more money with every Dayco Gold Seal Blanket because it has been designed to last and last. It won't peel or split from fabric base nor will it swell, emboss or deboss. It's resistant to chemicals in the ink and unaffected by accepted wash-up solutions. Further, it works wonderfully well with the newest quick-dry, high-gloss or kromekote inks and deposits them with a new exactness on regular offset, vellum, kromekote or any other coated stock.

For even better results, add Dayco Offset Rollers and you have an unbeatable quality combination. Dayco Rollers have a velvet touch that picks up just the right amount of ink and spreads it with unequalled accuracy at highest speeds. In addition, when Dayco Rollers finally do require attention, they can be "re-Daycoed" (re-surfaced like new) for still further service at a fraction of the original cost.

To give your customers the finest quality lithography at the lowest cost per run, switch to Dayco Gold Seal Offset Blankets and Dayco Offset Rollers right away. They're your guarantee of faithful reproduction, sheet after sheet . . . the ultimate in quality lithography. Mail coupon for money-saving facts today!

For even greater profit . . . add COLOR

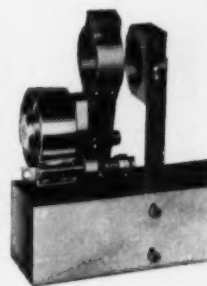
## The Dayco Fountain Divider

Ideal for split color and all other fountain uses, completely leak proof, easy to clean. Gives complete control at fountain without strain on ratchet. Easily adjusted, the Dayco Fountain Divider always holds its shape. Fully Guaranteed!



## The Dayco Color Separator

Imagine! Several colors one time through the press! That's what you can do with the new Dayco Color Separator—and without cutting your rollers. It's the only mechanical color separator made. Gives splits as narrow as 1½" with no color mixing. Saves roller cost, make-ready, press time.



© D.R. 1954

## Dayton Rubber

Since 1905

Dayco Rollers . . . for Offset, Letterpress, Newspaper, Gravure, Anilin, Coating, Graining, Steel Mills. Dayco Offset Blankets. Dayco Fountain Dividers. Dayco Color Separators.

West Coast Distributor, Tillicum Rubber Co., Lacey, Wash.

### DAYTON RUBBER CO.,

Dayco Division, Dept. 13, Dayton 1, Ohio

Gentlemen: I'm interested. Send complete information on how I can get more saleable sheets of higher quality lithography and more economy in my color runs with the Dayco Gold Seal Offset Blanket, Dayco Roller, Dayco Fountain Divider and Dayco Color Separator.

Name \_\_\_\_\_

Firm \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

MODERN LITHOGRAPHY, December, 1954

# NOW — A WASH-UP SOLVENT THAT DOES IN ONE STEP WHAT OTHER SOLVENTS DID IN 3



Now you can have the ultimate—a newly-developed formula that cleans rollers faster, safer, better than any former solvent (or combination)

For 2½ years, our laboratories at Knox Soap Company searched for the answer. Now we have it — the ultimate in cleaning solvents that the Printing Industry has waited for — *Little Benjy 1-Step Wash-Up Solvent*.

Try *Little Benjy*. Note its safe, speedy, thorough action. See how it can save time and money for you. Once you have, we're certain you'll never want to go back to old-fashioned solvents.

## LOOK AT THESE ADVANTAGES

- Average wash-up time 3-10 minutes
- One solvent instead of 3 — cuts costs 75%, reduces storage space
- Cleans 70% better (based on actual laboratory tests)
- Will not damage plates
- Will not scale rollers
- Leaves no greasy residue, no unpleasant odor
- Non-toxic for all practical purposes
- High flash point meets safety requirements of every city in the U.S. (Tagliabue open cup flash point, modified to meet requirements of Central Testing Laboratory, City of New York — 152° F.)

## GET YOUR FREE SAMPLE NOW

Prove to yourself that this new wash-up solvent is *the* ultimate formula you've been looking for. Write to us for generous trial sample of *Little Benjy* now.



3300-22 WEST CERMACK ROAD-CHICAGO 23, ILLINOIS, U.S.A.

# News

## ABOUT THE TRADE

### Sees Adv. Going Higher

American business will expand its investment in advertising during 1955 to a level \$500 million above 1954, according to Eldridge Peterson, editor of *Printers' Ink*. Last month he predicted that the total in '55 would be about \$8,750,000,000 compared with about \$8,250,000,000 this year. The total in 1953 was \$7,800,000,000 he said.

Business in general looks better than this time last year, and with increasing competition, more will be spent in advertising and selling, Mr. Peterson observed. He addressed the Philadelphia chapter of the American Marketing Association.

### U. S. P. & L. Pays Dividend

U. S. Printing & Lithograph Co. of Cincinnati, Ohio, declared a dividend of \$1 per share on common stock, payable Dec. 1. This brought 1954 payments to \$2.20 a share, the same as the 1953 distribution. Directors also voted the regular quarterly dividend of 62½ cents a share on the cumulative preference "A" stock, payable Jan. 2.

### Ketterlinus Elects Carrick

Martin W. Carrick, vice president and director of art of the Ketterlinus Lithographic Mfg. Co., Primos, Pa., was elected to the board of directors of the company in November. Mr. Carrick has been associated with the company for 40 years, and was elected to the board to fill a vacancy created by the retirement of Theo-

dore E. Wiederseim, who has been actively associated with the company for almost 60 years.

### Essentials Show Held

The Biltmore Hotel in New York was the scene of another Advertising Essentials Show, November 15-17, and many lithographers and other graphic artisans trooped through the numerous exhibits during the three days. Some lithographers' exhibits, their work, and other displays ranged all the way from point-of-purchase merchandising service to a huge mechanical walking elephant.

Exhibitors included the following lithographers: Alpha Corp., New York; Colorgraphic Offset Co., New York; Dexter Press, New York; Green Duck Metal Stamping Co., New York; and Peter Press, same city.

### Smith Joins Nashville Co.

Marvin E. Smith has been appointed advertising and sales promotion manager for Cullom & Gertner Co., Nashville printers and lithographers, it was announced in November by Alven S. Gertner, president. Mr. Smith formerly was associated with Thor Corp., American Marietta and Crane Corp. in Chicago, and most recently with Temco, Inc., Nashville.

This follows a recent announcement from Cullom & Gertner Co. of the 48 year old firm's expansion program in the specialty printing field. Plants are located in Nashville, Tenn. and Atlanta, Ga., with sales offices in eight cities.

### Soderstrom Honored

Walter E. Soderstrom, executive vice president of the National Assn. of Photo-Lithographers, was the honored guest at a testimonial dinner at Hotel Pierre, New York, November 17. Speaker of the evening was Senator Wayne Morse of Oregon, and the event was sponsored by the graphic arts division of the current campaign for State of Israel Bonds. Mr. Soderstrom was selected for the testimonial because of his visit in 1952 to Israel, and the many talks he has made and the support he has given to Israeli causes since that time.

Samuel H. Marks, New Era Letter Co., who is division chairman of the bond drive, reported that good progress was made toward the group's goal of \$250,000.

Another guest at the dinner was the widow of the late Col. David Marcus, an American who died in Israel's fight for independence. Mr. Marcus was a personal friend of Mr. Soderstrom.

Appreciation for Mr. Soderstrom's interest in Israeli affairs was shown by the presentation of an inscribed plaque to him by Bernard S. Rosenstadt, of Ardlee Service, Inc.

### Phila. Firms Add Presses

Majestic Press, Inc., Philadelphia, recently put in a Harris 35 x 45" single-color offset press. It also was announced that Zabel Bros. Co., that city, added a 52 x 76" two-color offset press.





### Nekosoa Advances Men

Nekosoa-Edwards Paper Co., Port Edwards, Wis., through its president and general manager John E. Alexander, has announced the advancement of three men in sales positions. Gerard E. Veneman (left) has been named vice president and director of sales; Carl A. Schiebler (center) was appointed general sales manager; and L. A. Gardiner (right), assistant general sales manager.

Mr. Veneman has been general sales manager since January, 1954, and has

served in various sales capacities for the company in New York, Chicago and the Midwest. Mr. Schiebler has 25 years of paper sales experience, and has been with Nekosoa since 1936. He opened the company's New York office in 1937 and continued there as manager until 1946 when he became assistant general sales manager. Mr. Gardiner has been assistant sales manager since 1952, and prior to that time was for 16 years a sales representative for the company. This included work in Los Angeles, Chicago, and Detroit.

### Express Rates Reduced, Result of LNA Work

**R**EDUCED express rates on shipments of many types of advertising and printed matter were put into effect by Railway Express Agency, Inc. on Nov. 27, the company announced.

The Lithographers National Association, New York, reports that the reductions came as a result of work over a two-year period by its transportation committee. H. F. C. Brown, Western Printing & Lithographing Co., is chairman of this group, and A. A. Wuchterl, The Gugler Litho Co., formerly was chairman. Both men appeared at Interstate Commerce Commission hearings on behalf of the association's members. Other members of LNA's transportation committee who were active in securing these rate concessions are: J. R. Hernandez, U.S. Printing & Litho Co.; T. E. McKie, The Forbes Litho Mfg. Co.; and Joseph Spallins, Einson-Freeman Co., Inc.

The substantial third class rate reductions — as high as 40 percent or more depending on weight and distance — are based on new pound rates and cover nine distance groupings. The old rate was 1-1/5 cents per ounce regardless of distance. Under both the old and new rates, minimum charges are \$1.80 with charges not to exceed first class express rates.

Among the principal articles to which the new rates apply are: advertising matter, almanacs, blanks, books, calendars, greeting and other cards, catalogs, circulars, labels, pamphlets, sheet music, tags, tariffs, magazine covers, and magazines, and other publications not registered as second-class mail matter.

LNA said that if there are other items which should be added to this list, they would like to hear about it and possibly further action would be taken.

### Bruno Speaks in N. Y.

Members of the Metropolitan Lithographers Assn. at their December 6 dinner meeting at the Hotel Shelburne, New York, were to hear of the latest developments in lithographic techniques. Michael H. Bruno, research manager of the Lithographic Technical Foundation's laboratory in Chicago, was to deliver an illustrated talk on the recent developments in lithography and how they improve quality and end-use value to the customer.

### YLA Hears Agency Man

Because agency production men usually "grow up" in letterpress work, offset salesmen have an educational job to do as well as a selling

job. Salesmen should know the advantages as well as the disadvantages of their process in order to do an intelligent job. These were the ideas put forth by a printing buyer of a large advertising agency at the Nov. 10 meeting of the Young Lithographers Association of New York at the Advertising Club. The speaker was Lewis Greenwood of Young & Rubicam.

Salesmen should be experts in their branch of the graphic arts because jobs are complex, require fast and efficient handling, and seldom have any leeway for errors or time losses. The offset plant should have good inside sales service personnel to handle changes and expedite work at all times, he said. Mr. Greenwood said that too many salesmen appear to be selling estimates instead of printing. He likes to talk to salesmen who are willing and capable of helping him with his problems, the speaker declared.

Assisting Mr. Greenwood in handling questions from the floor was Maison Clarke, art director of Y & R. The meeting was planned by the Young Lithographers to promote a better understanding of agencies' problems.

The YLA planned to participate in the combined Christmas party with other graphic arts groups in the city, and will resume regular monthly meetings at the Advertising Club on the second Wednesday of January.

### Soman Joins Brett

Alfred Soman has joined Brett Lithographing Co., Long Island City, N. Y., as sales promotion manager, effective November 15, it was announced by William M. Winship, vice president and general manager. Mr. Soman joined National Process Co. in New York 17 years ago, and was in sales and sales promotion work. He remained with National after it was purchased by Western Printing & Lithographing Co., and has been with that firm in New York until the present change.

Mr. Soman is a charter member of the Young Lithographers Assn. of New York and is a past president.



### Urges Better Ag'cy Understanding

Lithographers, printers and advertising agencies will each get along better in their own businesses when they learn to get along better together, Jerome B. Gray, senior partner of Gray & Rogers, Philadelphia advertising and public relations agency, told members of Printing Industries of Philadelphia, Inc., at a recent luncheon meeting.

Citing examples of misunderstandings and misrepresentations that have been traditional between printers and advertising agencies, Mr. Gray told the meeting that both industries are to blame for a situation that is hurting public relations and business prospects for both and undermining customer and public confidence.

Mr. Gray recommended that both printers and advertisers make a serious and studied effort to be better informed about mutual problems; cultivate new and constructive attitudes toward each other and their mutual clients, the buyers of advertising and printing.

### Direct Mail Continues Up

The estimated dollar volume of direct mail advertising used by American business during September, 1954 was \$108,698,520 according to figures released by the Direct Mail Advertising Assn., New York. This represents a gain of 8.5% over the expenditure of \$100,098,332 of September, 1953.

During the first nine months of 1954, an estimated \$967,647,032 was spent on direct mail advertising, representing an increase of 6.77% over the expenditure of \$906,301,335 during the first nine months of 1953.

### Franklin Offset to Build

Franklin Offset Litho Co., Chicago affiliate of Neely Printing Co., plans to start construction of an addition to its plant at 917 N. Franklin St., as soon as city authorities settle certain zoning questions that have arisen. The new addition will be erected on a lot adjacent to the present site, a company spokesman said, and will probably be two stories

high, to provide 12,000 sq. ft. of floor space needed to accommodate expansion of facilities. Before any definite steps can be taken, however, the building and zoning court will have to decide a big question—whether the rear wall of the projected structure must be 8 feet from the center line of the alley or 5 feet, as requested by Franklin Offset.

### Wis. Craftsman Elect

Milwaukee-Racine Craftsmen last month elected Clifford L. Helbert of Marquette University Press as their president for the next year. Other officers are Edwin Bachorz, Western Printing & Litho. Co., first vice president; Ray Vallier, Western States Envelope Co., second vice president; Jack Miller, Specialty Press, recording secretary; Henry Kutsche, E. F. Schmidt Co., treasurer; and Lavine Jacobson, Olsen Publishing Co., financial secretary.

### New Toledo Co.

Formation of S & S Master-Lith, Inc., a new offset printing firm at 4605 Douglas Road, Toledo, Ohio, was announced by John O. Snell, president. Mr. Snell formerly was with Rad-Mar Press since 1940 and most recently was superintendent.

Other officers of S & S are Margaret Snell, vice president, and William H. Schwalbert, secretary-treasurer. S & S has been equipped with two offset presses.

### Add Equipment in East

Harris-Seybold Co., Cleveland, recently announced installations of equipment in the East during the period from Aug. 1 to Sept. 30. These included the following: George W. King Printing Co., Baltimore; Publications Press, Baltimore and Arthur Thompson & Co., Baltimore, all 22 x 34" two-colors; National Printing Co., Union, N. J., a 21 x 28" offset press; Atlantic Press Corp., New York, a 17 x 22"; Finley Offset Corp., New York, a 22 x 34" two-color; General Reproductions, Inc., New York, 22 x 34" two-color; New York City Press, Inc., 21 x 28 offset press and a Seybold 44" cutter.

Also Rudisill & Co., Lancaster, Pa., a 22 x 34" two-color; Allen, Lane & Scott, Philadelphia, same model; and Cuddy Lithograph Co., Edgewood, R. I., a 21 x 28" press.

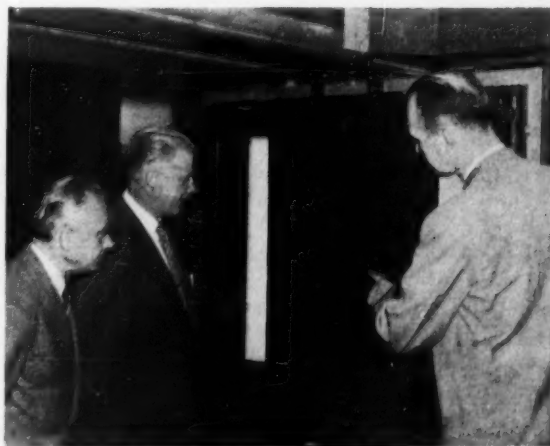
### Todd Purchasing Chief Dies

John E. Bertsche, Jr., 47, director of purchases of the Todd Company, Inc., Rochester, N. Y., died Nov. 8, at his home. Mr. Bertsche had been associated with the Rochester check manufacturing firm for over 20 years. He joined Todd in 1934 as secretary to Walter L. Todd, now chairman of the board.

A veteran of World War II, Mr. Bertsche served in the U. S. Navy from November, 1942 to November, 1945.

### Installs Mask System

Daniel Murphy & Co., New York trade plate-makers, have installed the Vari-Mask system of color correction. Shown here (L-R.) are Angelo Pustorino, of the company, and Mr. Murphy looking on as Herbert P. Paschel points to a register frame installed on a camera. The system, designed and installed by Mr. Paschel, extends the masking operations, and provides more precise control in all forms of masking. It may be used for contact masking, camera masking and color com-



posing. Mr. Paschel is a graphic arts consultant in New York.

### Cal Ink Sales at High

William H. Brandes, president of The California Ink Company, Inc., reports the highest sales ever recorded for the 63-year-old firm, in the annual report released in November. The report, for the 1954 fiscal year ended September 30, shows sales of \$12,285,944. This is a 6% increase over 1953, and a 46% increase since 1950. Sales for October, first month of the 1955 fiscal year, showed a 20.8% increase.

Mr. Brandes paid special tribute

to the research and development program instituted several years ago at Cal Ink. He said that this year's increased sales were tangible benefits of this program, and that as a result of the success, work on new processes and new products will be further intensified.

Cal Ink spent \$382,000 during the year for new buildings, machinery and equipment.

Cal Ink is said to be the largest company of its kind in the West. In addition to its headquarters at

545 Sansome Street, San Francisco, and its main plant in Berkeley, Cal Ink has branch plants in Los Angeles, Portland, Seattle, Salt Lake City, Phoenix and Honolulu. In addition to a diversified line of printing inks, Cal Ink also has a large Graphic Arts Supplies Division which distributes a wide range of items from cameras and other equipment down to plates, films and chemicals used in everyday operations in the lithographic and printing industry. Other divisions at Cal Ink are the Roller Division which has its own roller casting and curing plants, and the Paint Raw Materials Division which is now supplying colorants, dry colors, vehicles, pigments and driers to the paint industry on a national basis.

During 1954, Cal Ink introduced a new line of screen process inks, based on a simple intermix system and available in flat, gloss, acetate and decal inks. A complete line of screen process supplies is also offered.

### Weier Joins Flint on Coast

Herman J. Weier, rotary and gravure press specialist, has joined the Pacific Coast sales staff of the Howard Flint Ink Co. of Detroit, the company announced last month. Mr. Weier has had press experience with Brown & Bigelow, Detroit Gravure Co. and the *San Francisco Examiner*. His headquarters are at the Flint factory, 6100 Avalon Blvd., Los Angeles.

### Add Machines in S.W.

Globe Color Press, Oklahoma City, and Bowman Printing Co., same city, each added a Harris 17 x 22" offset press recently. In El Paso, Texas, Rocky Mountain Bank Note Co., put in a Seybold 44" spacer cutter.

### Coast Firms Add Presses

General Printing Corp., Los Angeles, recently added a Harris 35 x 45" offset press. A Harris 21 x 28" press was put in by California Printing Co., San Francisco.

### Schmidt Litho Appoints

Schmidt Lithograph Co., San Francisco, has appointed Jack Wichert national advertising and sales promotion manager.



## Jomac Roller Cleaner pays for itself

**Cleaner keeps presses running,  
frees pressmen from costly downtime delays**

If Jomac Roller Cleaner never cleaned a dampener roller (a job it does with dispatch), it would still pay for itself in short order. Because by breaking in a complete set of rollers simultaneously, the cleaner saves 15 minutes running time per press. This economy alone can pay for the cleaner inside of a year.

### Increases cover life 50%

In its primary job, the Jomac Roller Cleaner cuts downtime further, increases dampener cover life 50% by cleaning thoroughly without tearing covers or breaking stitches. The only labor involved is filling the tank with water, adding cleaning fluid, and switching on the motor. The rollers emerge clean, smooth, and, in the case of new rollers, free of lint.

### Write for literature

Send for the latest literature on Jomac Roller Cleaner, and for a list of users in your area. Give us the overall length of your longest dampener, and we'll quote you the price of the proper size cleaner. Sizes from 36" to 96". Jomac Inc., Dept. L1, Philadelphia 38, Pa.

Use Jomac Seamol and Flanel seamless coverings for your dampener rollers

# JOMAC Inc.

### Sees Need of U. S. Exhibits

Bernard S. Rosenstadt of Ardlee Service, Inc., New York lithographing and direct mail firm, and former president of the Metropolitan Lithographers Assn., last month emphasized the need for the graphic arts industry in the U. S. to make its scope known abroad.

Mr. Rosenstadt outlined his thoughts as follows:

"I visited the Dusseldorf, Germany, Graphic Arts Exhibition held in May 1954—better known as DRUPA. Thousands and thousands of visitors from all parts of the world viewed the exhibits, and I understand that 77,000 Americans were there.

"Naturally everything there was geared up to boost the German graphic arts manufacturers and suppliers. One manufacturer of offset presses—a German firm—distributed a folder stating that of the four hundred offset presses they manufactured annually, 70 percent of them were exported to 65 countries!

"After spending several days viewing the exhibition I wondered whether these visitors knew anything about the United States or the U. S. graphic arts, its manufacturers, suppliers, paper mills, etc. They probably knew very little unless they had visited the United States.

"Wherever and whenever a graphic arts exhibition is held we should enlist the aid of all those interested in the manufacture, development and use of graphic arts equipment. To further this end, support would be forthcoming from graphic arts trade associations, press and equipment manufacturers, Craftsmen's clubs, etc. Exhibits would be prepared utilizing panels, photographs, charts, drawings, montages, etc., depicting all phases of the graphic arts—press and equipment manufacturing plants, publishing plants, binding and finishing plants, composition plants, printing, offset and gravure plants of various sizes.

"Pictorially we would show how many plants there are in the United States; how many people are engaged in this field of endeavor; weekly, monthly or yearly wages and salaries



Charles A. Harwood

### Miehle Advances Men

Two new executive appointments in the Miehle Printing Press & Mfg. Co., Chicago, were announced recently by Carlton Mellick, vice president in charge of sales. Charles A. Harwood was named field sales manager, and F. Irving Walsh, product service manager.

"Due to the increased number of printing presses of different types that we have in our product line, delegation of functions and responsibilities is a necessity," Mr. Mellick said.

In the new position of field sales manager, Mr. Harwood's duties will include training sales personnel, formulating sales objectives and managing Miehle's field

(which would be translated into the currency of the major nations of the world), and other vital statistics.

"We, here in the United States, know the value of publicity and we should be able to use it intelligently and effectively—not only for the graphic arts but to help our over-all picture in the world's affairs."

Mr. Rosenstadt urged the trade to "do something about it."

### Offset Firms Show Products

W. A. Krueger Co., Milwaukee, Wis., lithographers, took part in the National Motel Show, first of its kind in this field, held in Chicago, Nov. 1-3. Displayed in the booth were samples of the Krueger "micro-color" scenic post cards. Printing in four colors is by an exclusive, patented process, developed by the company. W. A. Krueger, president, explained. Distribution is by direct sales and through one broker, he said. Also featured was the Krueger service for production of folders and booklets for motels and resorts. Assisting Mr. Krueger were Robert Klaus, vice



F. Irving Walsh

sales staff. Mr. Harwood formerly held the position of manager of western offset sales. He is a graduate of Ohio State University and Ohio Northern Law School.

In the new position of product service manager, Mr. Walsh will give his full attention to service management, acting as a general coordinator, directing installation, service and repair order functions and technical services.

Mr. Walsh is a graduate engineer and has had diversified experience in the company, serving in the engineering, installation and sales departments, and headed the technical section. He is a graduate of Princeton University and served in the Navy with the rank of Lt. Commander.

president, and members of the sales staff.

Lithographed art reproductions in frames with rear light for night illumination were offered for motel wall decoration by Formed Products Co., Elmhurst 73, Queens, N. Y. Stock pictures, obtained from Goes Lithographing Co., Chicago, are embossed to simulate brush mark effects of oil paintings, according to Harold Joachim, sales manager. He was anxious, he said, to contact other lithographers who might have other stock prints available, with which he could increase the variety of subjects.

### Gordon Heads Ryan Sales

E. G. Ryan & Co., Chicago dealers in graphic arts equipment and supplies, has announced the appointment of John J. Gordon as sales manager. According to Clark Q. Snyder, vice-president, Mr. Gordon comes to Ryan & Co. from the Addressograph-Multi-graph Corp., and has 15 years of varied experience in many phases of the printing industry.



# Here's Bold - Brilliant





# Lithogem<sup>\*</sup>

## <sup>\*</sup> IPI'S HIGH COLOR-STRENGTH OFFSET LITHO INK

New IPI Lithogem colors really sparkle . . . look almost as bright when dry as when wet. These new inks are more fool-proof on the press, faster setting, too, with excellent drying and binding qualities. And they really fight water, reduce greasing problems to make colors stay cleaner, stronger.

Best of all, Lithogem inks are press-ready, with the normal amount of drier for most stocks. They stay softer-bodied and remain uniform in body and tack over long periods. You can keep them until ready to use.

We believe that IPI Lithogem Offset Inks are the finest you can get. They are the first choice of leading litho plants from coast to coast, and are available in all colors shown in the IPI Offset Color Guide. We invite you to compare them with the best regular and process colors you are now using. Your IPI representative will gladly arrange a test run to suit your convenience.

## COMPLETE INK SERVICE FOR LITHOGRAPHERS

Lithographic plants of all sizes are invited to use IPI's complete ink service facilities in litho centers from coast to coast. Each local IPI service station and branch is staffed by local experienced ink men, well-seasoned in the special lithographic problems—large and small—of each locality. They are always on call to help you. For prompt ink service with a personal touch, contact IPI.

*IPI, IC, and Lithogem are trade marks of Interchemical Corporation*

**Interchemical Corporation**

PRINTING INK DIVISION • 67 W. 44th ST., NEW YORK 36, N. Y.



**RELY ON IPI FOR LEADERSHIP IN INK RESEARCH**

## De Luxe Check Printers Outlines Profit Plan

UNUSUAL features of the Employees' Profit Sharing Trust, introduced in 1943 by De Luxe Check Printers, Chicago, were explained by the company's president, G. W. McSweeney, at the 7th annual conference of the Council of Profit Sharing Industries in Chicago, late in October.

A profit sharing plan, rather than a pension plan, was adopted Mr. McSweeney said, because, at the time, De Luxe Check Printers was financially unable to assume the funding commitments required for a pension plan.

It was felt, he said, that profit sharing offered more benefits to those who might not remain with the company until retirement, and that it might provide a more substantial retirement nest egg.

Within about 15 years, he said, the Fund is expected to be large enough to meet the full needs of retirement in a satisfactory manner. Meanwhile, he explained, if the employee reaches 65 before the Fund is large enough, an interim type of retirement program, integrated with Social Security, has been arranged. This feature he described as a "self-liquidating pension plan," which should eliminate itself entirely when the profit sharing fund is large enough to do the entire job.

Because of the average age of employees today, Mr. McSweeney said, there will be no great retirement obligation for the next 15 or 20 years. "In any one year," he stated, "the maximum obligation could not possibly exceed \$50,000, and we think this could readily be paid out of current earnings, since it is relatively small compared to our contribution to the Trust."

Of particular interest was Mr. McSweeney's statement that in developing the profit sharing plan De Luxe Check Printers rejected the principle of compulsory retirement at any predetermined age, because of age alone.

"It seemed to us," he said, "that any employee who wanted to con-

tinue work beyond the age of 65 and who, in the opinion of the management, was able to perform his duties, should be permitted to do so. We recognized that compulsory retirement is easier for management, but we hold the view that retirement is for the benefit of the employee and not for the convenience of management."

At the same time, he continued, it is recognized that the company must be in position to pay a pension to any employee who has been with the firm 20 years or more and who wants to retire at 65.

"We are convinced," he said, "that, if an employee elects to retire at 65, his combined retirement income, available to him from Social Security, the profit sharing trust and supplementary allowances from the company, should be sufficient to enable him to continue to maintain his standard of living. Examination of a number of other pension plans shows that drastic readjustment of living standards was necessary, which is not in accord with our thinking."

If, after reaching 60, an employee wishes to "ease off" on his work, the company readily permits this, he said. The man can take extra time off each year, without compensation, in addition to his four weeks' vacation with pay. But since he would still be sharing in the profit trust

during the five-year period, the decision to take off extra time is left entirely to the employee's opinion. After 65, management exercises the option on the "easing off" program, he added.

"If the employee is perfectly sound and healthy at 65," he explained, "and able to do a full year's work, then management should not urge him to take any extra time off. But, if a reduced work schedule appeared to be in the best interest of both employee and company, he should be required to take the extra time off, in order to protect his health and, at the same time, insure the company satisfactory performance."

The interesting thing in the whole program, Mr. McSweeney said in concluding, "is the opportunities that a deferred type of profit sharing plan provides, to serve the best interest of the employee during his period of employment, after his retirement and upon his death. It more or less demonstrates the great flexibility of profit sharing."

### Adds Press in St. Louis

American Lithographing Co., St. Louis, recently completed installation of a Miehle No. 36 offset press, it was announced by Werner Fredricks, owner. This is part of an expansion program he said. The company serves other firms as a trade shop. It also conducts evening retraining courses for offset pressmen.

### St. Louis Co. Expands

Simmons-Sisler Co., St. Louis, announces the recent installation of a new Miehle No. 61 two-color offset press. This is the second 61 two-color for this firm, which also operates a Miehle 29 offset and two large single-color Miehle offsets.

Looking over the new installation are (left to right) R. Kleinschmidt, Miehle representative; A. O. Brossard, vice president and general manager; John Tross, superintendent, and Milton Cooke, offset foreman.

Known throughout the Midwest as producers of fine color letterpress and offset printing, Simmons-Sisler indicated that the



new two-color was part of an expansion program to increase and improve present facilities. Additional space has also been acquired with the purchase of an adjacent building.



The St.Regis Story  
*told in two words.....*

(...THE TWO WORDS...)

# ..."wider range!"

*For just about  
any printing job you  
can name,*

**YOU CAN FIND  
THE RIGHT GRADE LISTED  
IN THE ADJOINING COLUMN.**



Here, under one brand, is the widest range of printing papers you are likely ever to need!

When you have a particular job in mind, chances are St. Regis can supply the right grade for it.

Today it may be a deluxe brochure, tomorrow a simple envelope stuffer, and next week an inexpensive catalog . . . all grades can come from a St. Regis mill.

And all grades are available through one source of supply. For St. Regis makes all its grades quickly available to printers and lithographers through leading Paper Merchants. Quality of product is assured by established grades, dependable service, reputable company.

*A series of exhibition pieces has been prepared, demonstrating the fine results obtainable with St. Regis "fine papers for fine printing." Write for these St. Regis Paper Demonstrators or ask your Paper Merchant for them.*



**St. Regis  
Sales Corporation**

Sales Subsidiary of the St. Regis Paper Company  
230 Park Avenue, New York 17, N. Y.

## ENAMEL PRINTING PAPERS

### CELLUFOLD

Enamel C2S

Enamel C1S

### CELLUGLOSS

Enamel C2S

Enamel Cover C2S

Litho C1S

Printing Enamel C2S

Dull Finish Enamel C2S

### IMPERIAL

Enamel C2S

Enamel Cover C2S

Offset Enamel C2S

Litho C1S

### PLIABLE

Enamel C2S

Enamel Cover C2S

Offset Enamel C2S

Litho C1S

## COATED PRINTING PAPERS

### SUNBEAM COATED

### SUNRAY COATED

### MERRITT COATED

## UNCOATED BOOK PAPERS

### DE SOTO

English Finish

Eggshell

Super

### CELLUSET OFFSET

### ROCKET OFFSET

### CELLUPAQUE BIBLE E.F.

### IMPERIAL BIBLE E.F.

### BRITISH OPAQUE E.F.

## UNCOATED PRINTING PAPERS

### SUNBEAM PRINTING

English Finish

Eggshell

Super

### SUNBEAM OFFSET

### STANDARD PRINTING

English Finish

Eggshell

**FOR FINE LETTERPRESS  
PRINTING AND  
OFFSET LITHOGRAPHY  
ON JOBS SUCH AS**

Book jackets

Book covers

Wall hangers

Catalog covers

Catalog indexes

Industrial catalogs

Box covers and  
liners

Menus

Labels

Envelopes

Greeting cards

Brochures

Advertising  
specialties

Charts, slide rules

Broadsides

Folders

Inserts

Booklets

Bulletins

Box wraps

Annual reports

School annuals

House organs

Publications

Bibles, directories,  
books



FOR PACKAGING &  
PAPER CONVERTING  
PRESSES & MACHINES

**THERE ARE IDEAL ROLLERS  
FOR EVERY FABRICATING OPERATION**

**LETTERPRESS AND  
LITHOGRAPHIC PRESSES**

For all rollers on flatbed and rotary presses  
Forms, Distributors and Feeds

**ANILINE (FLEXOGRAPHIC)**

Impression  
Inking and Fountain Rollers  
Infeed and Outfeed, Trolley  
Tinting and Colorverter

**BLUE PRINT MACHINES**

Impression

**CARBON MACHINES**

Carbon Sheet Cutter Rollers  
Cold Aniline Carbon Applying  
Hot Carbon Applying  
Spot Carbon Applying

**CELLOPHANE BAG MACHINE**

Draw and Feed Rollers  
Impression  
Inking  
Heat Sealing

**CORRUGATED BOX MACHINE**

Upper and Lower Feeds  
Inking  
Split Pull  
Scoring Heads  
Stitcher Pull  
Tape Ratchet Feeds

**ENVELOPE PRESS**

Feeds  
Inking  
Scoring  
Gumming

**FOIL MACHINES**

Foil Applying  
Laminating  
Embossing  
Back-up

Glue Mounting Pressure Rolls  
Pressure Squeeze Roll  
Pinch  
Reverse Rolls  
Slitting Machine

**FOLDING MACHINE**

Non-Marking Feeds and Folding for  
Printing and Wax Papers

**LABELING MACHINES**

Feeds  
Gluing  
Glue Transfer

**LACQUERING AND VARNISHING**

Coating  
Impression

**MANIFOLD MACHINES**

Carbon Control  
Feeds  
Inking  
Perforator

**MILK CARTON PRESSES**

Feeds  
Inking

**NAPKIN PRESS**

Feeds  
Inking

**WALL PAPER**

Back Sheeter  
Embossing and Squeeze  
Grounding  
Pull Rollers

**WAXING**

Applying  
Edging  
Impression Impregnating  
Laminators  
Wax Metering  
Rewind

*Ideal Rubber and Synthetic Plate Gums*

*Ideal Sticklike Rubber Plate Adhesives*

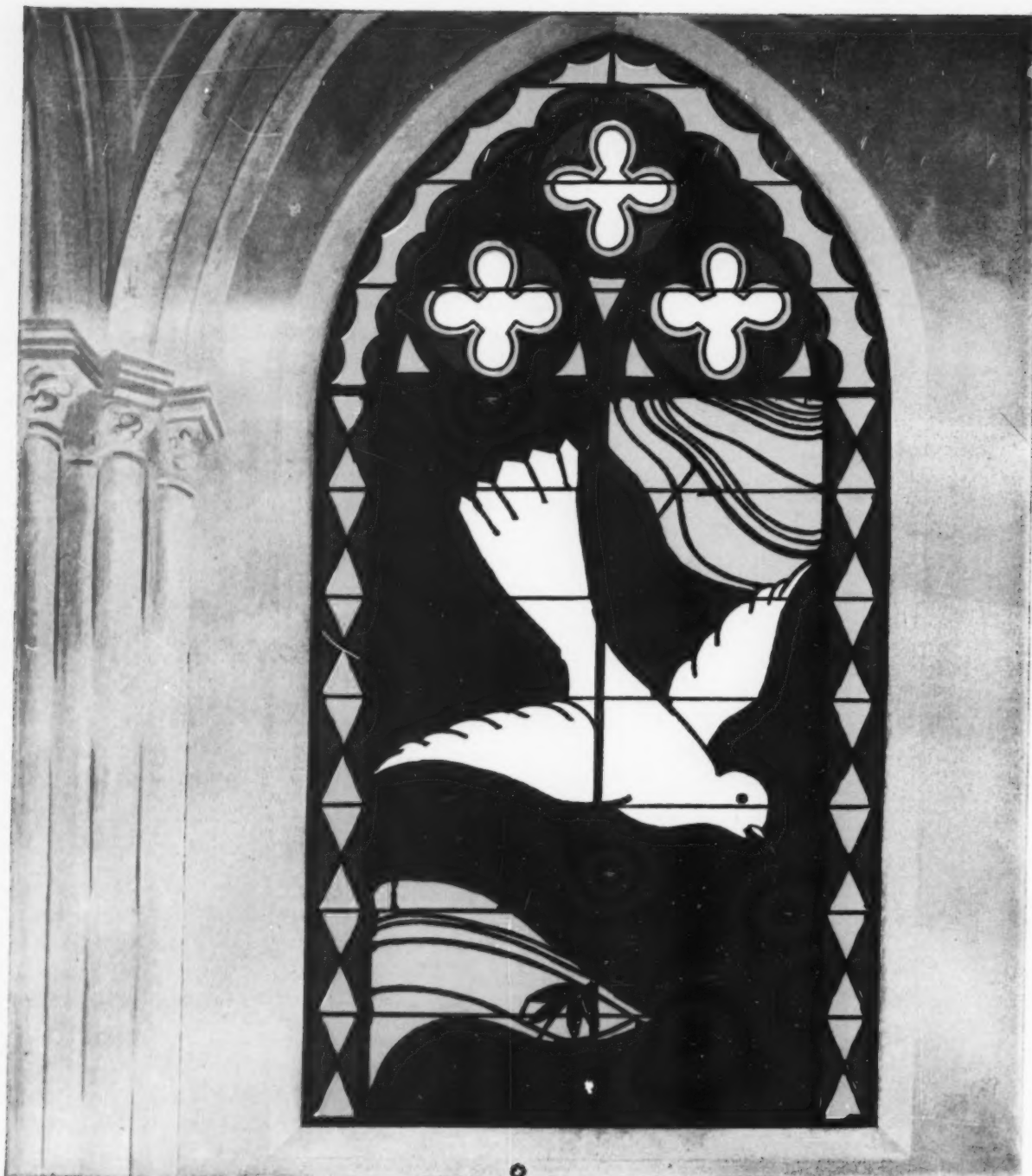
**Many Other Formulas On Order To Meet Your Own  
Particular Requirements**

**IDEAL ROLLER & MANUFACTURING COMPANY**

6069-6073 Maywood Avenue  
Huntington Park, Calif.

2512 West 24th Street  
Chicago 8, Illinois

21-24 Thirty Ninth Avenue  
Long Island City 1, N. Y.



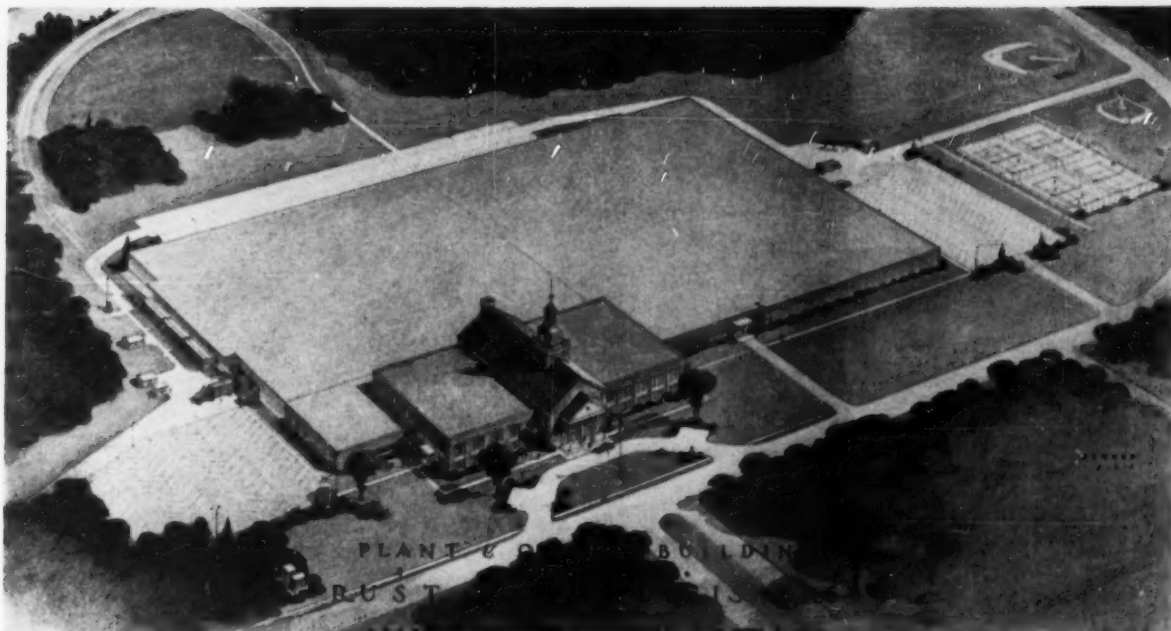
Peace on Earth..  Goodwill to Men

**LEWIS ROBERTS, INC.**

FINE PRINTING AND PRECISION OFFSET INKS

NEWARK 5, N. J.

OFFICES IN TWENTY CITIES



#### New Rust Craft Plant

Architect's aerial sketch shows new Rust Craft Publishers, Inc., \$3,000,000 building to be ready in Spring of 1955, dedicated Oct. 23, 1954. The roof is nearly on, and as of Nov. 2, workmen had started to place the siding on the factory exterior. The brick walls of the office are completed and the many interior masonry partitions were under way at press time. The plant is in Dedham, Mass.

Fred W. Rust, Jr., director, public relations, announced that additional equipment has been purchased for the firm's new plant. It includes one 42 x 58" Harris offset; one two-color 42 x 58" Harris offset; and two 65" Seybold automatic cutters.

There are many other items Rust Craft will be ordering in December, such as whirlers and graining machines, he said. The company will employ about 1,500 persons.

#### MLA Group Hears LaBlanc

Sixty members of the Metropolitan Lithographers Assn. New York union (ALA) employer group, got some helpful tips on employee relations from Charles W. LaBlanc of the Research Institute of America at their first meeting of the winter season held at the Hotel Shelburne, Nov. 4. Mr. LaBlanc in his speech, *Better Employee Relations for More Production*, emphasized the importance of the feeling among members of a production organization that they be recognized as part of a team. They must feel that they "belong," that they understand management's objectives, that they receive recognition, and that their suggestions are listened to, he said. Mr. LaBlanc has played an important part in the employee training programs of the printing and lithographic industries, and is a member of the Executive Staff of the Research Institute.

William Rogers of Rogers & Rogers, Inc., who manage the collection service for MLA members for slow paying accounts, outlined methods and precautions which keep

credit losses to a minimum. Henry Latimer, executive director of MLA gave a summary of the work of the association's programs for assisting members through credit information on new accounts, the employment bureau for lithographic help not covered by the union contract, and the premium payments made under the MLA waste paper program for members.

Daniel Arvan, MLA's director of labor relations, outlined the work which had enabled MLA members to avoid work stoppages in the recent strikes of non-lithographic unions in New York, William M. Winship, Brett Litho Co., talked of some of the things he had seen in lithographic plants in Europe during his recent trip to several countries there.

#### Lowery, Schwartz Incorporates

Lowery & Schwartz, Inc., 40-year-old trade finishing firm in New York was incorporated recently. The company does varnishing, lacquering and die cutting for the trade. Recently it was reported here in error that the

company was in the lithographing and printing business.

#### Printing Exhibit Set

A record number of entries in the 13th Exhibition of Printing of New York Employing Printers Association, Inc. was forecast last month. Deadline for final submission of entries was Nov. 15. The exhibit will be held in the Bowman Room of the Biltmore Hotel, New York, Jan. 17-21. It will be a highlight of the Printing Week observance in the city.

Judges for the exhibition include William M. McNeill, Union Carbide and Carbon Corp.; Ernest F. Trotter, *Printing Magazine*; O. Alfred Dickman, *New York Herald Tribune*; Harold E. Bisson, Fred Wittner Advertising and Melvin Loos, Columbia University Press.

#### Salesmen To Convene

The annual convention of the International Printers Supply Salesmen's Guild will be held next year at the Netherland Plaza Hotel Aug. 7-10.



### New IPI Minneapolis Plant

IPI has just announced a new, modern home for its Minneapolis branch office and service station. Built on the northeast corner of Hiawatha Avenue and East 26th Street, this new structure was engineered for better ink service to printers and lithographers with special attention to the needs of package printers, IPI said. The property is located for easy access to arterial streets and highways for fast delivery and has ample parking space at the side of the building.

Built primarily of brick, cut stone, cement block, concrete and steel, the building is laid out for efficiency in ink making and customer service. In addition to easy ac-

cess by overland trucks, the location has its own railroad siding.

The interior of the new building, covering 11,400 square feet, provides for sections which have been planned and finished for working ease and scientific lighting.

The service station section is completely equipped with modern facilities for mixing, milling, color matching and proofing. Precision machines of the latest type assure ample ink production during even the peak periods of activity.

The new IPI Minneapolis location also provides extra storage space for both raw and finished material of all types. A part of the property is reserved for a future tank farm.

### Davidson Appoints Ryan

W. W. Davidson, Jr., executive vice-president of the Davidson Corp., Brooklyn, has just announced the appointment of E. G. Ryan & Co., 153 W. Huron St., Chicago, as the authorized distributor of Davidson equipment in the Chicago area. Sales, service and supplies are being handled from the Ryan office, and the Davidson branch office at 531 S. Plymouth Court has been closed.

### Phila. Assn. to Build

Printing Industries of Philadelphia, Inc. is planning to construct its own building at Nineteenth and Cherry Streets, according to an announcement by Thomas McCabe, public relations director. PIP has been a tenant in various locations for 66 years. The association is presently located at 1234 Locust Street. Mr. McCabe said the new building will serve as a center of the entire Graphic Arts industry in Philadelphia.

Joseph F. Matlack, president of the association, has appointed D. Edward McAllister general chairman of the PIP building committee. Assisting

McAllister will be Arthur H. Kinsley, who will be in charge of the industry-wide fund raising campaign; C. Howard Thomas, who is handling advance subscriptions and John S. Williams, in charge of special gifts.

The project will involve an expenditure of approximately \$150,000 and it is the hope of PIP's building committee that this amount of money will be forthcoming from industry member firms in the form of contributions of 3% debentures payable over a period of 20 years.

### Fraser Adds New Machine

Fraser Paper, Ltd., has announced that its new paper machine, recently installed in its mill in Madawaska, Maine, now is in full production. The machine, requiring space nearly 300 x 50 feet, produces a web of paper 15 feet wide at a rate of 1000 feet a minute, the company says. This amounts to over 300 miles of paper every 24 hours, and will increase the mill's capacity by about 10,000 tons annually.

The new machine replaces one which had been installed in the mill in 1923, three years after the mill

began operations. It is part of an extensive modernization program undertaken by Fraser Paper since the war.

The mill employs about 800 people in the Madawaska area. This is the northernmost town in Maine.

### Nekoosa Advances Men

Increasing activity in advertising and public relations fields for Nekoosa-Edwards Paper Co., Port Edwards, Wis., has resulted in new positions for three men, John E. Alexander, president and general manager has announced.

Tad R. Meyer, formerly advertising and public relations manager, has been named to the newly-created position of director of advertising and sales promotion. Kendall Green, advertising staff member since 1951, has been appointed assistant advertising manager.

Keith Roberts, formerly assistant advertising manager, has been named public relations manager, and will be in charge of community and public relations programs and publicity. He will continue as editor of the firm's monthly magazine, "Nepco News."

### Show 50 Years of Color

"Fifty Years of Color," an exhibition of photography, was previewed at the Ives Color Co., 10 S. 13th Street, Philadelphia, December 2 by the Art Directors Club of Philadelphia.

In addition to an outstanding collection of color photographs, the exhibition included some original negatives and equipment of the late Frederick E. Ives, a pioneer color photographer. A demonstration of step by step procedure of the Ives Color process also was held. Michael Pitcairn, head of the Ives Color Co., was host to the art directors.

### Bindery Adds Cutter

Oxford Bindery, Philadelphia, recently installed a Lawson three-knife trimmer. This is the second Lawson machine, the firm having previously installed a 52" Electronic Spacer Cutter.





4 color offset reproduction

WARREN'S  
**Lithographic Papers**

*Lusterkote • Offset Enamel • Overprint Label C1S • Sebago Label C1S*

*Fotolith Enamel • Silkote Offset*

**PAPER MERCHANTS**  
*who sell and endorse*  
**Warren's Standard Printing Papers**

ALBANY, N. Y.	Hudson Valley Paper Company
ATLANTA, GA.	Sloan Paper Company
BALTIMORE, MD.	The Barton, Duer & Koch Paper Co.
BANGOR, MAINE	Brown & White Paper Company
BATON ROUGE, LA.	Louisiana Paper Company, Ltd.
BIRMINGHAM, ALA.	Sloan Paper Company
BOISE, IDAHO	Zellerbach Paper Company
BOSTON, MASS.	Storrs & Bement Company
	The Century Paper Co., Inc.
	Henry Lindenmeyr & Sons
	Carter, Rice & Company Corp.
BUFFALO, N. Y.	The Ailing & Cory Company
CHAMPAIGN, ILL.	Franklin-Cowan Paper Company
CHARLOTTE, N. C.	Crescent Paper Company
CHATTANOOGA, TENN.	Caskie Paper Company, Inc.
CHICAGO, ILL.	Virginia Paper Company, Inc.
CINCINNATI, OHIO	Southern Paper Company
CLEVELAND, OHIO	Chicago Paper Company
COLUMBUS, OHIO	McIntosh Paper Company
CONCORD, N. H.	The Dism & Winst Paper Company
DALLAS, TEXAS	The Petrequis Paper Company
DAYTON, OHIO	The Ailing & Cory Company
DENVER, COLO.	The Cincinnati Cordage & Paper Co.
DES MOINES, IOWA	C. M. Rice Paper Company
DETROIT, MICH.	Olmssted-Kirk Company
DUBUQUE, IOWA	Hull Paper Company
EVANSTON, ILL.	Carpenter Paper Co.
FORT WORTH, TEXAS	Western Newspaper Union
FREEMO, CAL.	Newhouse Paper Company
GRAND RAPIDS, MICH.	Seaman-Patrick Paper Company
GREAT FALLS, MONT.	Newhouse Paper Company
HARRISBURG, PA.	Zellerbach Paper Company
HARTFORD, CONN.	Olmssted-Kirk Company
HOUSTON, TEXAS	Zellerbach Paper Company
INDIANAPOLIS, IND.	Quimby-Walstrom Paper Co.
JACKSON, MISS.	The John Leslie Paper Company
JACKSONVILLE, FLA.	The Ailing & Cory Company
KANSAS CITY, MO.	Henry Lindenmeyr & Sons
KNOXVILLE, TENN.	Storrs & Bement Company
LANSING, MICH.	L. S. Bosworth Company
LITTLE ROCK, ARK.	Crescent Paper Company
LONG BEACH, CAL.	Townsend Paper Company
LOS ANGELES, CAL.	Virginia Paper Company, Inc.
LOUISVILLE, KY.	Midwestern Paper Company
LYNCHBURG, VA.	Wertgame Paper Company
MEMPHIS, TENN.	Southern Paper Company
MILWAUKEE, WIS.	The Weisinger Paper Company
MINNEAPOLIS, MINN.	Western Newspaper Union
MOLINE, ILL.	Arkansas Paper Company
MONTGOMERY, ALA.	Zellerbach Paper Company
NASHVILLE, TENN.	Zellerbach Paper Company
NEWARK, N. J.	Miller Paper Company
NEW HAVEN, CONN.	Caskie Paper Company, Inc.
NEW ORLEANS, LA.	Southland Paper Company
NEW YORK CITY	Nackie Paper Company
	The John Leslie Paper Company
	Newhouse Paper Company
	Weaver Paper Company
	Clemente Paper Company
	Henry Lindenmeyr & Sons
	Storrs & Bement Company
	Henry Lindenmeyr & Sons
	Bulkley, Duntun & Company
	Alco Paper Company, Inc.
	Henry Lindenmeyr & Sons
	The Ailing & Cory Company
	J. E. Linde Paper Company
	The Canfield Paper Company
	Marquardt & Company, Inc.
	Schlomer Paper Corporation
	Zellerbach Paper Company
	Western Newspaper Union
	Field Paper Company
	D. L. Ward Company
	The J. L. N. Smythe Company
	Schuykill Paper Company
	Zellerbach Paper Company
	The Ailing & Cory Company
	C. M. Rice Paper Company
	Zellerbach Paper Company
	Narragansett Paper Co., Inc.
	Carter, Rice & Company Corp.
	Storrs & Bement Company
	Zellerbach Paper Company
	B. W. Wilson Paper Company
	Virginia Paper Company, Inc.
	The Ailing & Cory Company
	Zellerbach Paper Company
	Beacon Paper Company
	Tobey Fine Papers, Inc.
	The John Leslie Paper Company
	Newhouse Paper Company
	Zellerbach Paper Company
	Shiner-Sien Paper Company, Inc.
	Zellerbach Paper Company
	Zellerbach Paper Company
	Zellerbach Paper Company
	Zellerbach Paper Company
	Louisiana Paper Company, Ltd.
	Zellerbach Paper Company
	The Paper House of New England
	Bulkley, Duntun & Company
	Zellerbach Paper Company
	The Ailing & Cory Company
	The Commerce Paper Company
	Henry Lindenmeyr & Sons
	Troy Paper Corporation
	Tulsa Paper Company
	Olmssted-Kirk Company
	Zellerbach Paper Company
	Stanford Paper Company
	Western Newspaper Union
	Zellerbach Paper Company

**EXPORT AND FOREIGN**  
 NEW YORK CITY (Export) National Paper & Type Co.  
 40 cities in Latin America and West Indies.  
 NEW YORK CITY (Export) Moller and Rothe, Inc.  
 20 countries in Latin America and West Indies.  
 NEW YORK CITY (Export) Muller & Phipps (Asia) Ltd.  
 Belgian Congo, Burma, Ceylon, China, Hong Kong, Iceland,  
 India, Malaya, Philippine Islands, South Africa.  
 AUSTRALIA B. J. Ball Limited  
 NEW ZEALAND B. J. Ball (N. Z.), Ltd.  
 HAWAIIAN ISLANDS Honolulu Paper Co., Ltd.  
 Agents for Zellerbach Paper Company



PHOTOGRAPH BY RAYMOND E. HANSON

**WARREN'S**  
**Lithographic Papers**

*Lusterkote • Offset Enamel • Overprint Label C1S • Sebago Label C1S*  
*Fotolith Enamel • Silkote Offset*

Warren's LUSTERKOTE COVER provides a mirror-like glossy surface that contributes brilliance to the highlights and colors in lithographic reproduction. Now available with the lustrous finish on both sides of the paper.

Warren's OFFSET ENAMEL is a double coated paper for the printing of pictures by offset lithography. Double coating improves printability and uniformity, resulting in a higher potential of lithographic reproduction. Offset Enamel is available in glossy finish, Saxony finish, and dull finish. Also available coated one side only.

Warren's OVERPRINT LABEL is double coated on one side and is

eminently suitable for labels produced by offset lithography or by letterpress. This paper is pre-conditioned by an exclusive process.

Warren's SILKOTE OFFSET has the appearance of a wove offset but has a unique pigmented surface that gives more brilliant reproduction. It also offers a high degree of dimensional stability. Silkote Offset is available in Wove and Saxony finish.

Warren's FOTOLITH ENAMEL is a new quality of machine coated two side paper for the reproduction of halftones by offset lithography.

Warren's SEBAGO LABEL C1S is a new quality of machine coated label paper for offset lithography or letterpress.

*Write for free booklet—"How Will It Print by Offset"*

**S. D. WARREN COMPANY • BOSTON 1, MASS.**

[ BETTER PAPER  BETTER PRINTING ]  
 Printing Papers

#### Edward E. Gauche Dies

Edward E. Gauche, 76, retired senior vice president of the U. S. Playing Card Co., Cincinnati, Ohio, and former brigadier general in the New York National Guard, died in Cincinnati Nov. 2, following a long illness. He had retired in 1945, after suffering a slight stroke.

Starting with the firm in 1896, Mr. Gauche became manager of its New York office in the early 1900's, and following army service in World War I, he became president of the Standard Playing Card Co. of New York, which had been absorbed by the Cincinnati concern.

Mr. Gauche was a bachelor, and survivors are a brother and three sisters, all of Cincinnati.

#### Gibson Sets Up Profit Plan

The Gibson Art Co. of Cincinnati, Ohio, a leading manufacturer of greeting cards, has established a profit-sharing retirement plan, under which a share of company earnings will provide substantial retirement pay for employees.

Principal feature of the plan is that 10 percent of annual net earnings before Federal taxes up to \$2 million, and 15 percent of net profits above \$2 million, will go into the profit-sharing retirement fund. Employees will not be required to pay anything into the fund, and no deductions for withholding or social security will be made. The plan permits employees to retire after 20 years of service.

#### Gibson Buys Acreage

The Gibson Art Co. of Cincinnati, Ohio, greeting card manufacturers, has purchased 113 acres of land in suburban Amberley Village for future expansion of its manufacturing operations. These, for many years, have been located in the downtown area of the city.

#### Playing Card Net Dips

Net income of the U. S. Playing Card Co. of Cincinnati, Ohio, and its subsidiaries for the nine months ended Sept. 30 totaled \$1,261,867, equal to \$3.27 per share. This compared with net income of \$1,273,193,

or \$3.30 a share, for the like period in 1953. Income before taxes for the first three quarters of 1954 amounted to \$2,551,767, and United States and Canadian income taxes were estimated at \$1,289,000, against gross income of \$2,881,927 and taxes of \$1,608,734 a year earlier. Directors declared a dividend of \$1 a share, payable Jan. 1 to stockholders of record Dec. 16.

#### Progress Wins Ball League

The baseball team of Progress Lithographing Co. of Cincinnati, Ohio, won the championship in a recent playoff of the Litho League, sponsored by the YMCA.

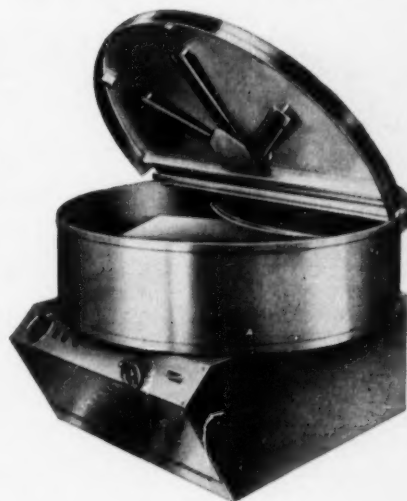
#### Add Rosback Machines

Announcements of recent Rosback machinery installations included the following: Parkin Printing & Stationery Co., Little Rock—a Pony gang stitcher; Herdell Litho Print, St. Helena, Calif.—an Auto-stitcher; Penn Lithograph Co., San Francisco—an Auto-stitcher; Pinaire Lithograph Co., Louisville—an Auto-stitcher; Lithograph Specialties, Inc., St. Paul—an Auto-stitcher; Baronet Lithograph; Johnstown, N. Y.—Auto-stitcher; Banknote Printing Co., Tulsa—Auto-stitcher; Padgett Printing Co., Dallas—Auto-stitcher; and Taylor Publishing Co., Dallas—a 22 Special perforator.

## Be Assured of WHIRLING SPEED ACCURACY with the BROWN LITHO PLATE WHIRLER

The Brown Whirler has the latest developments in precision whirling speed control. The convenient control panel, at the lower front of the whirler, contains an accurate reading tachometer which allows a steady reading of speed, a motor switch, a heater switch and a pilot light. Immediately alongside the control panel is the Reeves variable speed control. Speed of whirler can be varied between 35 and 100 rpm by a simple turn of the control wheel.

Brown Whirlers are available for plate sizes ranging from 21x25" to 61x81". Write for FREE catalog of the famous W. A. Brown photomechanical equipment.



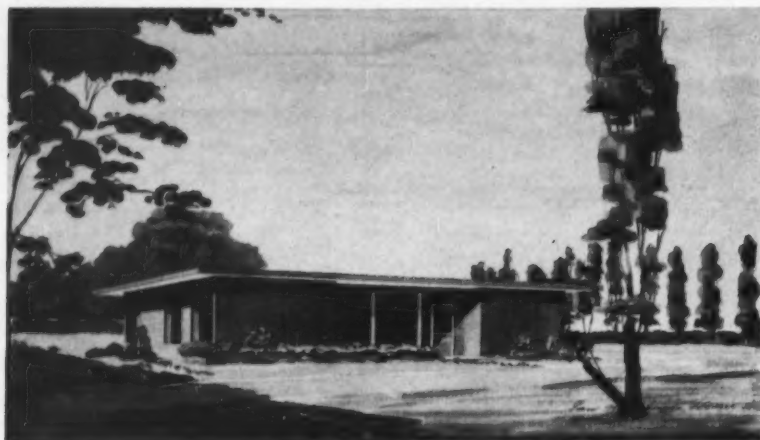
• DEALERS IN ALL PRINCIPAL CITIES.

 LAYOUT TABLE	 TEMPERATURE CONTROL SINK	 PRINTING FRAME	 DOWN DRAFT TABLE
			

**W. A. BROWN MANUFACTURING CO.**  
608 So. Dearborn Street, Chicago 5, Ill.

---

# Modern Lithography's New Home



We moved to our new building in Caldwell, N. J., early this month.

Please correct your records to indicate our present address—Box 31, Caldwell, N. J.

We haven't got our new phone number yet, but you can reach us for a while at ALgonquin 4-4033.

And you needn't feel that just because we took a short jump across the river to Jersey that we are now a jillion miles away. It's only a short run west of the Lincoln Tunnel.

Find out for yourself how short by coming out to see our new quarters some day soon. We'll be happy to show them to you.

## MODERN LITHOGRAPHY

Box 31

Caldwell, N. J.



### S & V Appoints Phila. Mgr.

Sinclair & Valentine has announced the appointment of Thomas B. Buchanan as manager of its Philadelphia plant at 18th and Cambria Sts. Mr. Buchanan, formerly plant superintendent of the Fred'k H. Levey Co.'s Chicago office, joined S & V in 1946. Mr. Buchanan succeeds Edgar E. Wikoff who has been active in the Philadelphia area for more than 45 years. Mr. Wikoff will continue to be associated with the Philadelphia office in an advisory capacity. He will continue as a vice president of Sinclair & Valentine Co., and as a member of its board of directors.

### Pittsburgh Industry Elects

Donald J. Inrig, of F. Englert Lithographing Co., was elected president of the Printing Industry of Pittsburgh, Inc., for 1955. Other officers are Robert L. Forsythe, of the Robert L. Forsythe Co., vice president; Arthur H. Gratz, Herbick & Held Printing Co., secretary; and Francis A. Roney, Colonial Press, Inc., treasurer.



### Nab Offset Counterfeiter

Secret service men nabbed a counterfeiter in Freehold, N. J. last month who they said was turning out offset reproductions of \$1, \$5, and \$10 bills. Agent above looks over offset plates found in possession of Roy Anderson, who used his equipment to print race track programs, but was accused of counterfeiting on the side.

Equipment included vertical camera which agents said produced "excellent" reproductions of the currency. (Photo courtesy Newark News.)

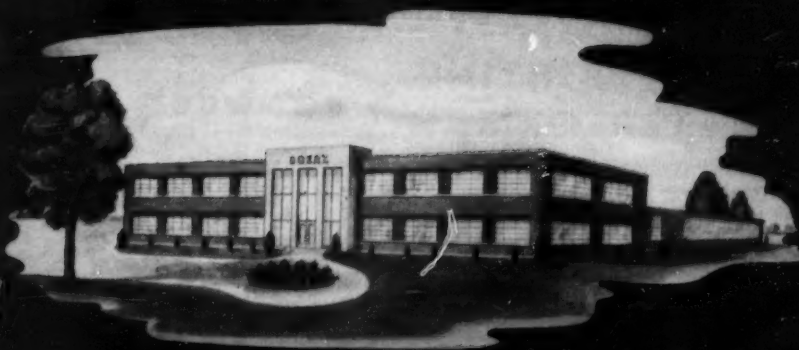
It was pointed out that it still is strictly illegal to photograph or make a negative of U. S. currency.

### Dankert Joins Flint in N. Y.

Fred J. Dankert has joined the Howard Flint Ink Co. in New York as technical service manager, the company announced Dec. 1. For the past 30 years, Mr. Dankert has been with Fuchs & Lang Mfg. Co. in various technical and laboratory positions in both New York and Chicago. For a number of years he was technical service manager of F & L in charge of the sales service laboratory. He has specialized in the formulation and development of offset, metal decorating and moisture-set inks. He started his career many years ago with Siemon & Elting, a pigment manufacturing concern, and later was with the litho and printing ink laboratory of American Bank Note Co. in New York. He has served on numerous panels in graphic arts meetings in the industry.

In his new post, Mr. Dankert is associated with John F. Devine, vice president of the Flint Co., who recently opened eastern offices for the firm in the Chrysler Building, 405 Lexington Ave., New York 17, N. Y.

*Thanks...*  
*to the*  
**GRAPHIC ARTS!**



Response to the new GOERZ Red Dot Artar Photo Lens has been so overwhelming—in addition to the continued demand for our other lenses—that larger and more modern production facilities became imperative.

Serving you from our new headquarters at Inwood, L. I., New York, will enable us to continue to provide the craftsmanship and high quality production that has always been associated with the name GOERZ!



**C. P. GOERZ AMERICAN OPTICAL COMPANY**

*Office and Factory*

**DOUGHTY BLVD., INWOOD, L. I. 96, NEW YORK**

### Hugh R. Munro Dies

Hugh R. Munro, a founder and vice president of Niagara Lithograph Co., died at his home in Montclair, N. J., November 20. Mr. Munro also was president of Montclair Printing Co., and was active in real estate and financial affairs in New Jersey. He also had gained prominence as a Presbyterian layman, and had headed several religious and philanthropic organizations.

### Add Presses in Midwest

Weed Printing Co., Columbus, Ind., recently put in a Harris 17 x 22" press. The same model press was installed by Peterson Printing Co., South Bend, Ind., while Oval & Koster, Inc., Indianapolis, put in a Harris 35 x 45" two-color offset press.

Capper Printing Co., Topeka, Kan., added a Harris 17 x 22".

### Amer. Bank Note Adds Press

American Bank Note Co., New York, recently placed in operation a Harris 35 x 45" two-color offset press.

### Platemakers Elect Murphy

Daniel J. Murphy, (right) head of Daniel Murphy & Co., New York, was elected president of the Lithographic Engravers and Platemakers Assn. in November. He succeeds Dante Mazzocco, Eureka Photo Offset Engraving, Inc., in the post. Howard Shadlen, Shadlen Litho Plate Corp., is vice president; John F. Maguire, Offset Engravers, Inc., is treasurer; and Julian Ross continues as executive secretary. The election was held at a dinner meeting at the New York Advertising Club, Nov. 16.



### Donnelley Shows Cards

R. R. Donnelley & Sons Co., had a Christmas exhibit, entitled "The Art of the Christmas Greeting," hung in its Lakeside Press Galleries in Chicago this month. Included in the display were more than 750 examples of Christmas cards using a wide range of production techniques, including the latest three-dimension cards made of string and wire. Earliest card shown was a rarity printed in Philadelphia about 1842

and bearing the then new poem "Twas the Night Before Christmas." Many others were the personal cards of noted American graphic arts designers.

"The exhibit demonstrates that there are unlimited ways of saying 'Merry Christmas,'" said Walter Howe, of the Donnelley design department. Visitors were welcomed daily, except week-ends and holidays, through December.

### Schmidt Appoints Wichert

Schmidt Lithograph Co., of San Francisco, has appointed Jack A. Wichert as national advertising and sales promotion manager. He will handle Schmidt's advertising, sales promotion and public relations work.

### Peklenk Retires

Walter Peklenk retired last month after 52 years with the Courier-Journal Lithographing Co., Louisville. He had started as a composing room messenger at the plant and had worked up to plant superintendent.

## SMOOTHER PRINTING PERFORMANCE *with the new* **EEZY-LITH** NUMBER 10

- ELIMINATE PICKING and sticking on coated and card stock
- PREVENT OFFSET
- OVERCOME Tackiness in inks or blankets
- BRING ABOUT faster drying
- FREE FLOWING consistency in the ink for more even coverage on solids

MEMBER



Not to be confused with wax compounds, varnishes or driers. "EEZY-LITH #10" will not change the shade of the ink or harm the rollers, plate or blanket.

**ROLL-O-GRAPHIC CORP.**  
Dept. M 133 PRINCE ST., NEW YORK, N. Y.

## Now you can...



Complete with lens, lamp, and timer.

**MAKE BIGGER PROFITS  
GIVE BETTER SERVICE**

*with a Precision*

**KENRO**  
**VERTICAL SPACE SAVER  
CAMERA**

**DOUBLE PAYOFF**—Better control of production and profits for you, faster service that will attract new accounts and satisfy existing customers.

**SPEED**—In less than 1/2 hour the average job can be rolled off your press—group jobs ready at the rate of 10 per hour. You'll save money on outside negative and plate purchases but more important your presses will produce more work and profits for you as lost time can be eliminated.

**SIMPLIFIED "AUTOMATIC" OPERATION**—Skill required? Certainly, but any of your present employees can acquire it within one hour as the Kenro has a simple 3-step Automatic method that guarantees excellent negatives.

**SAVINGS**—Get the facts, get all the facts and you will see that Kenro will enable you to reduce outside purchases and make money on negatives.

On display at **WILLOUGHBYS** 110 West 32nd Street

Guaranteed and manufactured by Kenro Graphics, Inc.,  
Chatham, New Jersey.

# Litho Club

## NEWS

### Cincinnati Club 10 Years Old; Will Celebrate

**E**LABORATE plans are being made for the tenth anniversary of the Cincinnati Litho Club, which will be observed with a dinner meeting on Feb. 8 in Hotel Alms in that city.

Starting with 10 members, the club now has a membership of about 75, representing all the leading litho plants in the Greater Cincinnati area. The club's broad program of year-around activities, which includes close cooperation with related printing groups, has been a leading factor in maintaining and expanding the lithographic industry throughout the Ohio Valley area.

Chester A. Scheidler of the Charles Hellmuth Printing Ink Corp. of New York, who was active in organizing litho clubs in several cities, including Milwaukee, Minneapolis and St. Louis, met with a Cincinnati group of prospective members on November 18, 1944, in Hotel Gibson.

Clifford Hebbeler of the Hennegan Co. was elected temporary chairman, and the organization meeting of the group was held in his home in January, 1945. At this meeting, the officers elected were: President, Mr. Hebbeler; vice president, Al Meyer, and secretary-treasurer, Wm. Jones.

Other charter members, all of whom, with the officers, comprised the board of governors, were Al Sides, Frank Miller, Frank Petersen, Fred Westemeier, J. O. Sanker, Hans Gruner and John Dreihls. All of the charter members are still living, and most of them continue to participate in club activities.

The first open meeting of the club was held in Schuller's Restaurant in February, 1945, with about 25 in

attendance. Most of these were prospective members, and all of them became active members.

During the succeeding years, club presidents have been Al Meyer, William Jones, Lou Weiss, Frank Petersen, Richard W. Fischer, Russell Smith, Theodore Williams and Larry Dougherty. Present officers are: President, William E. Staudt, Jr., of Young and Klein, Inc.; vice president, D. G. Flanagan, Korb Lithographing Co.; secretary, Ralph Eckard, Nielsen Lithographing Co., and treasurer, Thomas Lackner, Advance Decalcomania Co. Also on the Board of Governors are Larry Dougherty, Frank Miller, Joseph Hoffer, Ben Smith, Buford Payne and Russell Smith.

The Cincinnati club became a charter member of the National Association of Litho Clubs when it was organized in 1946, and Mr. Hebbeler was elected second vice president at the organization meeting in New York City.

Through the years, the Cincinnati club has held nine monthly dinner meetings annually, with about half of these being closed sessions for round-table discussions of industry problems, and the others being open sessions with prominent industry speakers. One or more of the open meetings each year is held in conjunction with some other printing group for exchanges of ideas and closer cooperation, and these sessions usually attract several hundred members and guests.

Three entertainment programs also are staged annually for members, their families and invited guests, and these always are very

enjoyable affairs. They are the moonlight boatripe on the Ohio River each June, when officers for the coming year are elected; a Christmas dinner dance and a mid-summer picnic.

The Cincinnati Litho Club is recognized as one of the most active and influential of the several printing industry organizations in Cincinnati, because its program is designed to promote the best interests of the industry, with especial emphasis on the important part lithography plays in this industry.

#### Stevens at Washington

William J. Stevens, Miehle Printing Press & Mfg. Co., New York, addressed the Washington Litho Club at its November 23 meeting at the Continental Hotel. He discussed the preparation of copy for offset. Mr. Stevens is the co-author of a book on the subject, "How to Prepare Art and Copy for Offset Lithography."

Formal election of nominated officers was held, and a slate headed by Leo Krebs as president was approved. Dave Fell, Navy Dept. is vice president; H. Thomas Driver, Batt, Bates & Co., is secretary; and James H. Ott, Navy Dept. is treasurer. Retiring president is Frank H. Mortimer, Government Printing Office. (Members of the board of governors were reported here last month.)

William C. Wendler, Haynes Lithograph Co., was elected to active membership in the club; and two associate members were named. James H. Austin, S. D. Warren Co., and William R. Patton, Harris-Seybold Co.

The annual Christmas party of the Washington Litho Club is being held December 11 at the grand ballroom of the Willard Hotel. A buffet supper was planned, with dancing until 1 a.m. Suppliers were contributing prizes.

Robert Rossell, Research Engineering Council of the Graphic Arts, is chairman of the affair, and members of the entertainment committee are Milt Egger, Charles Seaman, Ray Firor, Milt Eckert, Gil Miller and Wesley Jones.



### Twin City Names Lundgren

Axel Lundgren of Louis F. Dow Co., St. Paul, was named president of the Twin City Litho Club last month, to succeed Barney Skomar, the club announced. Other officers are Ed. Sorenson, John Roberts Printing, vice president; Paul Rudin, Brown & Bigelow, secretary; and Marvin Haenze, Photomatic, treasurer.

Members of the board of governors are: George Kueppers, Brown

& Bigelow; Roger Strand and Leonard Holzinger, Photomatic; Norman Albrecht, Offset Service; and Rune Hedenskoog, H. M. Smyth Co. Herman Goebel, Brown & Bigelow, was reappointed program director, and Bill Boshart, Eastman Kodak Co., was named club photographer.

William C. Huebner, of Huebner Laboratories, Mamaroneck, N. Y., addressed the club's Nov. 4 meeting at Covered Wagon in Minneapolis. He reviewed the progress in lithog-

raphy during the more than 60 years he has been in the field. He discussed color separations by prismatic light, and other developments.

The Twin City Litho Club planned to hold its Christmas party December 4 at the Commodore Hotel in St. Paul.

### St. Louis Elects Boes

The St. Louis Litho Club elected the following officers at its November 4th meeting: Al Boes, Mendle Printing Co., president; Harold Rohne, Letterhead & Check Corp., vice president; Walter Blattenberger, Western Printing & Litho. Co., secretary; Carl Gereck, Cavanagh Printing Co., treasurer. Mr. Blattenberger transferred his membership from the Philadelphia club to St. Louis at the November 4 meeting and was elected secretary of the club.

Gene Hanson, press foreman of the Ross-Gould Co., was admitted as a new member at the Nov. 4 meeting.

December 2 was set as the date for the annual Christmas Party of the St. Louis Litho Club, at the New York Hotel. Joe Russo and a five piece orchestra furnished entertainment.

January 6 will be the next meeting of the club.

The club has set up a new plan under which a different member is designated for each meeting to bring in some problem, either fictitious or actual, for discussion. The plan started with the November meeting when the subject for discussion was coated paper. The system will continue with the January meeting, which will be for members only.

### Chas. Anderson Dies at 52

Charles F. Anderson, 52, a founder and a charter member of the Boston Litho Club in 1947, died Oct. 27. He was superintendent of the offset department of Rand Avery-Gordon Taylor, Inc., Allston (Boston), Mass.

In 1926, he started in the industry by affiliating with Tudor Press, Inc., Boston, and then joined Rand Avery-Gordon Taylor, Inc., where he remained for 28 years, becoming superintendent five years ago.

'Twas the night before Christmas when all t  
Not a creature was stirring, not even a mo  
The stockings were hung by the chimney w  
In hopes that St. Nick would be  
The children were fast asleep  
While visions of sugarplums danced in their  
And Mamma was busy the night before  
Hark! The bell rang, 'twas the sound of  
W. A. Brown & Co. had just arrived  
I saw a great many fine  
Awakened to the  
Tore open the  
The Moon on the  
Gave a luster  
When, what to  
But a miniature  
With a little  
I knew in a mo  
More rapid  
And he wh  
"Now, Dash  
On, Comet!  
"To the top o  
Now, dash aw  
As dry  
w/

**Season's Greetings**

**BESCO**

**BRIDGEPORT ENGRAVERS SUPPLY CO.**  
BRIDGEPORT 2, CONNECTICUT  
and all its Branches



## Heads Chicago Club



The Chicago Litho Club, complying with a recently adopted revision of the by-laws, held its annual election of officers at the Nov. 18 meeting. Chosen to administer club affairs for 1955 were the following: president—Rae H. Goss (above), Inland Lithograph Co.; first vice president—Willis B. Perry, Offset Platemaking Service, Inc.; second vice president—James M. Ludford, Chicago Litho Plate Graining Co.; treasurer—W. Stuart Grau, Miehle Printing Press & Mfg. Co.; and secretary—Fred L. Faulkner, Chief Printing Co.

Under the new rules these officers will be installed in January.

The Chicago Club's new president, Mr. Goss, has been associated with Inland Lithograph Co. for 19 years. Previously he had served a three-year apprenticeship with a photo-engraving concern. At Inland he began in the shop and worked up through various positions to his present office responsibilities in charge of engineering sales.

Following the election came a panel discussion of "The Mystery of the Missing Dot" plus talks on camera operations, by a home town cast. Members of the panel were Elton Baker, past president of the club, and research director, John Dickinson Schneider; Melvin R. Smith, Chicago Litho Plate Graining Co.; and Leonard Florsheim, Robertson Photo Mechanix, Inc. The meeting was held one week earlier than usual because the regular date fell on Thanksgiving Day.

Future plans, announced by Willis B. Perry, chairman of this year's entertainment committee, include the customary Christmas Party and a "Ladies' Nite" dinner-dance in February.

Among the recent Chicago club achievements was the release of the second edition of its membership roster, a 32-page booklet, completely revised and brought up-to-date.

## Milw. Hears Kodak Man

Howard C. Colton of Eastman Kodak Co. was scheduled as the speaker for "Kodak Night" at the Milwaukee Litho Club, November 23. He was to discuss various kinds of light courses used for viewing color photographs and their effects on final reproduction results.

A feature of the meeting, at

Moser's Cafe, was to be an announcement of nominations of officers. Rudolph C. Bartz is president of the club this year.

The club reports a successful fall dance held October 31 at the Elks Club. This is an annual event of the Milwaukee Club.

The club is making plans for the annual convention of the National Assn. of Litho Clubs to be held May 6 and 7 at the Schroeder Hotel, Milwaukee.

## Urges "Grass Roots" Quality

"Grass roots quality control" is what is needed to keep lithography moving ahead, declared Robert S. Emslie, Jr., secretary of the National Assn. of Photo-Lithographers, as he addressed the November 17 meeting of the Litho Club of New York. Mr. Emslie emphasized the importance of the individual's skill in this field, and said that continued improvement in quality is an effective method of job insurance for the individual.

He cited by name cases of lithographic craftsmen who have started as apprentices and worked up to plant executives and owners through what he called a "hunger to know how." Efficiency never comes by an easy method, he said, but is the result of brains and skill.

The club announced that Martin

Walsh of American Colortype Co. has become a new member.

Nominations for officers and directors are to be announced soon, for the annual election at the January meeting. The club's December activity will be to participate in the combined Christmas party being held early in December.

## Return Engagement at Boston

The Boston Litho Club, breaking precedent, called on a speaker for a return engagement the following month. Chester I. Miller, vice president, The W. Oliver Tripp Co., Boston, the Nov. 8 speaker, was immediately "signed up" for the Dec. 6 dinner-meeting, Hotel Kenmore.

Subject matter was to be, "Printing Good Halftones," with Miller handling the plate and camera end, James F. Beldotte, General Printing Ink Co., in charge of the pressman's point of view.

The Boston Litho Club dispenses with its regular monthly dinner meeting, for January, 1955, but will participate as one of eight sponsors of the 9th Annual Printing & Publishing Week of New England, at Boston.

The February activity of the club will be the annual Ladies' Night-Valentine Party, on the 14th at the Hotel Somerset.

Dinner meetings will be resumed



## Named Deputy Public Printer

John M. Wilson (center) has been appointed Deputy Public Printer, it was announced Nov. 23, by Public Printer Raymond Blattenberger (left). Mr. Wilson has been employed in the Government Printing Office for 30 years and has been serving as assistant night production manager prior to his promotion. He is a graduate of Sterling College, Sterling, Kansas.

In announcing the appointment, Public Printer Blattenberger stated: "Mr. Wilson's long service as an executive in the production divisions of the Government Printing Office will make him of invaluable assistance to me in my program to reduce costs at the Government Printing Office and to provide the Government's printing economically and efficiently."

on March 7th at the Hotel Kenmore, with former Public Printer of the United States, John J. Deviny, relating interesting data on "How to Print Money and Stamps."

The annual "Quiz Night" is slated for April 4th, Hotel Kenmore, in a joint dinner meeting sponsored by the Boston Litho Club-Boston Club of Printing House Craftsmen. This year, it will be the Boston Litho Club's turn to act as host. Moderator will be Elmer J. Grover of Case, Lockwood and Brainard, Division of Connecticut Printers. The panel has not yet been selected.

Making his annual junket to Boston at the May 11th annual meeting and election of officers, will be

Michael H. Bruno, research manager of the Lithographic Technical Foundation, speaking on "What's New in Lithography."

#### Add Equipment in Midwest

Several midwestern companies recently installed cutting and binding equipment according to an announcement by the E. P. Lawson Co., New York. These included Jefferson Printing Co., St. Louis—a 52" cutter; Loose Leaf Press, Milwaukee—a 39" cutter; Southard Calendar & Printing Co., Columbus—a 39" cutter; Richter-McCall & Co., Chicago—an automatic three-knife trimmer; and Interstate Printers & Publishers, Danville, Ill., the same.



#### Advanced by Pitman

The Harold M. Pitman Co. has announced the appointment of George M. Griffith (above) as manager of metropolitan sales for the New York area. Mr. Griffith has been employed by the Pitman Company in sales work since 1940. During the war he served with the U. S. Coast Guard as a lieutenant. Mr. Griffith will make his headquarters at the new Pitman offices at 230 W. 41 St., New York.

Manufacturing and warehousing activities of the company for the eastern area will continue at 1110-13th St., North Bergen, N. J. J. Edward Behre has been appointed general manager for this operation. Mr. Behre came with the Pitman Company in 1945 and has been employed in various sales and managerial capacities since that time.

#### Minn. School Offers Offset

The Graphic Arts Technical School, 1104 Currie Ave., Minneapolis, this fall inaugurated a course in offset lithography, the school has announced. This is one of a diversity of courses offered at the school, which is owned and operated by the non-profit Graphic Arts Industry, Inc.

The school recently added two Linotype machines to its facilities making a total of eight of these machines.

The technical school is unique in that it has no terms or semesters but students can enroll at any time throughout the year. Instruction is shaped to individual needs. The school remains open throughout the year except for two weeks before Labor Day and a week at Christmas time. It owns its own building.

Paul J. Ocken is vice president and general manager.

**from any angle**

**it's GENERAL for high production...**

**Models 18 to 52**  
Sheet Sizes from 7x7" to 38x52"  
Sheet Thickness up to .060"  
Speeds Up To 3000 Prints Per Hour

Screen Process Printing Presses designed and built for high speed production of posters, displays, signs, covers, greeting cards, decals, etc.

**Screen Process Decorator Presses** specially designed for printing on flat rigid material such as metal, glass, plastic, wallboard, etc.

**Models 125 to 142**  
Sheet Sizes from 4x9" to 28x43"  
Sheet Thickness from .020 to 1/4"  
Speeds Up To 2000 Prints Per Hour

The General Convector Dryer is a compact, automatic unit which, when coupled to a General Press, will deliver sheets at speeds up to 3000 per hour.

General handles a complete line of equipment, supplies and inks for use with General Screen Process and Decorator Presses.

**GENERAL RESEARCH & SUPPLY COMPANY**  
872 South Division Avenue  
Grand Rapids 3, Michigan

# Equipment

## SUPPLIES, BULLETINS

### Sword Hygrometer Improved

An improved, modern Paper Hygroscope (Sword hygrometer) now is being produced by the Cambridge Instrument Co., Grand Central Terminal Building, New York, the Lithographic Technical Foundation reports—LTF also says that old instruments in need of repair or modernization with LTF's new dial can be handled by Sportsmen Accessories, Inc., One River Road, Beacon, N. Y.

A correction chart for hygroscope readings was released recently by LTF. This chart greatly extends the versatility and usefulness of the instrument, LTF says. It corrects for errors that occur when there are wide differences between the RH and temperature of (1) the paper and (2) the room where the paper is being measured. With this chart, the lithographer can measure the actual RH of the paper with much greater accuracy. It permits him to order and check paper that has been pre-conditioned at the mill to run with best results in his pressroom. It also gives him more accurate information as to whether the paper needs to be conditioned before it is run.

### Champion Acquires Cap Concern

Reuben B. Robertson, Jr., president of The Champion Paper and Fibre Co., Hamilton, Ohio, last month announced his firm's acquisition of a controlling interest in the Mid-West Bottle Cap Co., Belvidere, Ill. Operation of the company will continue with the same name and personnel that Mid-West has had

over the past 30 years. Ray Blodgett, the founder, has expressed a desire to be relieved of the more strenuous duties of company president, but will continue as a consultant. Mr. J. Bruce Morford has been elected to succeed Mr. Blodgett as president.

Mid-West manufactures and nationally distributes aluminum milk bottle caps, hot drink cups and paper board caps, plugs, and tops. At the present time it employs about 175 people in two plants.

### New Roll Leaf Machines

Peerless Roll Leaf Co., Inc., 4511 New York Ave., Union City, N. J., has added two new models to its line of roll leaf stamping presses for printers and fabricators. Both machines handle roll leaf up to 6½" wide, and will feed in graduations up to ⅛". Details and specifications are available in Bulletin No. 545 and 546, offered by the company.



### N. Y. Firm Gets Big Camera

Claimed as one of the world's largest, a camera weighing almost five tons, has just been completed by Robertson Photo-mechanix, Inc., Chicago graphic arts and industrial camera manufacturer. A '55 Chevrolet accents its size. The camera, built for Triangle Litho Print, New York, measures 25 ft. in length, 9 ft. in height and 8 ft. in width and is constructed with an overhead design utilizing a bi-rail track with a one piece steel tube support, bringing the total weight of the track alone to over 3,000 pounds. The camera's rear case, lens case, copyboard frame and other com-

ponents are constructed primarily of one piece casting to give added strength and rigidity.

Film and glass plates from 4 x 5" up to 48 x 48" can be exposed through the camera's 42" process lens and the vacuum film holder operates on a new type double zone selector. Although cameras with larger film capacities and larger copyboards than this new Robertson 48" TRI-COLOR model are already in use, Robertson believed that this is probably the most massive, rigid and heaviest of any camera ever built. The camera was sold by Eastern Graphic Arts Supply Co., New York.



#### **Lists Photo Information**

A new listing of authoritative sources of information on all phases of photography, amateur and professional, has just been published by the Eastman Kodak Co. under the title "Kodak Books and Guides."

The Kodak publications described in this guide have been prepared by experts in their respective photographic fields. They include the latest authoritative information on both general and specific photographic subjects, including the industrial, scientific, and graphic arts fields.

It is available, free of charge, from the Sales Service Division, Eastman Kodak Company, Rochester 4, N. Y.

#### **Offers Offset Price List**

A "Jiffy Estimator and Price List" in a pocket size booklet format has just been issued by The Hub Offset Co., 175 Purchase St., Boston. Hub Offset produces offset lithography for the graphic arts trade. Herbert L. Borden, executive vice president, said that the new price list represents a

revision of format only, and not of prices. Copies are available from the company.

#### **Offset Equipment Catalog**

Foster Manufacturing Co., 210 N. Broad St., Philadelphia 2, has available a new 16 page catalog of composing and offset storage equipment. Featured are new products, never before available, the company says. Also appearing is a list of used typesetting and printing equipment.

#### **Consolidates Ohio Plants**

Sinclair & Valentine Co., New York ink manufacturer, has announced the consolidation of two of its plants in the central Ohio area, with headquarters at Rittman, Ohio. According to M. J. Leckey, president, the merger of the company's Cleveland and Rittman plants will effect a more efficient use of the technical help available, as well as increasing the utility of the existing laboratory facilities. In addition, Mr. Leckey

stated that considerably enlarged manufacturing facilities, additional equipment, and trained technicians are being added to make this site a complete factory for the production of printing inks for every type of printing process.

Richard P. Jones will continue as Sinclair and Valentine's resident representative for the Cleveland area, at 1359 Gordon Road, Lyndhurst 24, Ohio. It is further announced that arrangements have been made to provide direct collect telephone service to the Rittman plant for existing Cleveland customers.

#### **Brochure on Web Presses**

ATF Webendorfer web-offset presses designed for publication work are described and illustrated in a brochure just distributed by the Mount Vernon Div., American Type Founders, 230 E. Sanford Blvd., Mt. Vernon, N. Y. Some specifications and other data are given. Copies are available from the company.

## **SERVICE PLUS QUALITY! HAS MADE OUR PLANT THE WORLD'S LARGEST**

We Specialize in all sizes  
**MULTILITH and DAVIDSON PLATES**  
3M ALUMINUM PRESENSITIZED PLATES



All sizes ZINC and  
**ALUMINUM PLATES**  
UNGRAINED-GRAINED-REGRAINED



**Lithographic Plate Graining Company  
of America Inc.**

35-51 Box Street

Tel. EVERgreen 9-4260-4261

Brooklyn 22, N. Y.



### New Harris Plate Solution

A new solution that combines three separate presensitized plate-making operations into a single step has been announced by the Chemical Division of the Harris-Seybold Co. Named Harris "3 in 1 Solution," the new chemical takes the place of desensitizer, lacquer and gum when developing presensitized offset plates.

In addition to helping lithographers produce better presensitized plates in a manner which the company says is faster and at lower cost, the new Harris solution eliminates the need for a water supply, large working areas and several different chemicals. The new process is so simple that even relatively inexperienced personnel can develop a good presensitized plate, since there is no chance of over-development or filling in of dot patterns, Harris says.

After the plate is exposed, it is necessary only to pour a pool of Harris "3 in 1 Solution" on the plate and rub the entire surface with a moist sponge. Non-printing areas are completely desensitized and images develop immediately. When excess solution is wiped off and the plate rubbed dry, no additional washing or gumming is required.

### S & V Branch Men Meet

Sinclair & Valentine Co., New York, recently held the third in a series of group meetings for its branch managers, at the S & V Ridgeway, Pa., plant. M. J. Leckey, president of S & V, in establishing a scheduled series of sectional meetings announced that their purpose was to enable the company's directors to become more familiar with individual representatives and their local plans and problems, and to permit S & V representatives to meet the top management group and become better acquainted with the company's objectives.

It was announced that an additional research department had been created within the organization, one of whose functions will be the distribution of advanced technical information to the various branch men.



### Offers Paper Calculator

The Oxford Paper Co. has just released another aid to printers and other paper users, in the form of a new Paper Cost Calculator. It consists of a set of tables, thumb indexed, to give the exact cost per thousand sheets for common sizes of book papers, covers, bonds, ledgers, and writings. The booklet also features a simple method for estimating the paper cost per thousand copies for some of the more common sizes of printed pieces.

A companion piece to the Calculator, Oxford also offers a Paper Selector Chart designed to help the printer or other paper user select the right grade of paper for each particular job.

Both items may be obtained from Oxford merchants in 90 cities, or by writing direct to the Oxford Paper Co., Advertising Service Department, 230 Park Ave., New York 17, N. Y., on your business letterhead.



### Does Step-Repeat Jobs

This new vacuum printing frame device has just been introduced for performing step-and repeat jobs. Operator is shown here aligning vertical rule with base rule. Magnetic base directly below mat holds rules and metal film bar securely to plate for registration. Rulers and film bar may be moved in either direction for any number of steps, with accuracy up to thousandths of an inch, according to the manufacturer, Magnastep Co., 5912 Harry Hines Blvd., P. O. Box 1848, Dallas, Tex. The device has light-tight rubberized fabric curtains which eliminate necessity for layout sheets. It occupies 18 square feet of floor space and has four operating controls.

Information is available from the company.

This was the most recent of a series of branch manager meetings conducted by S & V this year. The last previous meeting was held in Atlanta and was attended by eleven branch representatives.

### New Two-Color Guide

The Graphic Publishing Co., 240 W. 40 St., New York 18, N. Y., has announced a revised edition of the Duo-Color Guide. This new 1955 edition marks the first revision since the original printing in 1948. Changes in two-color usage and production techniques, and the widespread adoption of standard second colors by publications, are included in the modernization and revision of the Guide.

Use of the Duo-Color Guide aids in specifying two-color combination printing, or in ordering engravings for such printing. The Guide is equally valuable for use with letterpress, offset and gravure printing processes, the company says.

The 100 pages of the Guide present the actual results of 4,200 two-color combinations, in large printed patches. Each page shows every practical combination of one color with Black, or of one color with a key color. All the most effective colors are included. Every possible two-color combination of the 4-color process colors is presented. A special section treats combinations involving the five A.A.A.A. recommended standard second colors. The ink and screen used to get each of the 4,200 results shown by the printed patches are clearly indicated.

### Alum-O-Lith Appoints

Donald Deal has been appointed general manager for Alum-O-Lith, Inc., manufacturers of Alum-O-Lith double duty plates and chemicals, according to Bert Menne, vice president and sales manager for the firm. Mr. Deal, who formerly held the position of Rocky Mountain district manager, is a graduate of the University of California and has been active with the Alum-O-Lith organization for the past 6 years. He is the son of Elmer Deal, Alum-O-Lith technical director.

His main duty will be the coordination of the activities of the production, sales and research departments at the Alum-O-Lith offices and plant at 5601 Valley Blvd., Los Angeles.

#### Joins Los Angeles PIA

William J. Robinson, former manager of the pricing department of the Charles R. Hadley Co., has been named director of management services for the Los Angeles PIA. While with Hadley he prepared some of the original text and edited chapters for a Hadley book on cost accounting, worked in cost analysis and control of stock items and productive operations. He majored in printing management at the Carnegie Institute of Technology and was gradu-

ated from the College of Puget Sound with a degree in business administration.

#### Printing Volume Level

Printing sales in the Los Angeles area have leveled off, according to the monthly volume chart conducted by PIA. The figure is well above the highest point reached in 1953, although the year's high of last June was succeeded by a seasonal drop in July and August.

## LITHOGRAPHERS!

*"Watercote"*  
has proven to be  
PRACTICAL and ECONOMICAL

### Make Your

#### • COLOR PROOFS

From negatives using black and primary colors on an opaque white plastic sheet.

#### • WITHOUT

Overlays or a press proof or additional equipment.

#### • WITH

Speed and economy never before possible.

The process is as simple as the making of a "Blueline", requiring no other skill. Colors and techniques have been vastly improved since "Watercote" was introduced 18 months ago. All colors are clear and potent. Colors are developed one upon another without protection or lamination between colors. The process uses negatives, making a positive print of all colors in register by surprinting.

The "Watercote" color print, processed by your men in your plant will unfold the practical uses it will serve.

#### 5 PRIMARY COLORS

#### 30 MAP COLORS

\$3.00

per quart

\$10.00

per gallon

#### THE TRIAL "WATERCOTE" KIT FOR \$7.50 INCLUDES

2 sheets of Loftrite #30—24" x 30" x .010"  
4 eight ounce bottles of emulsion colors, and  
simple directions, easy to follow.

#### IMPROVED COLORS

See your dealer or order direct from  
Dept. M



#### DIRECT REPRODUCTION CORPORATION

Manufacturers of Plastic Sheetting, Direco V-base Film and Light-Room Emulsions  
811-813 UNION STREET BROOKLYN 15, NEW YORK

#### Stevens Speaks

William J. Stevens, offset manager of the Meihle Printing Press & Mfg. Co., New York, talked on "What Letterpress Printers Should Know About Offset," at a recent meeting of the Anthracite Club of Printing House Craftsmen in Scranton, Pa. He discussed cost, comparison, quality of offset printing, equipment buying and hiring of manpower and exhibited samples.

#### Macbeth Appoints

The Macbeth Corp., Newburgh, N. Y., manufacturers of color matching illumination equipment and electronic instruments, has announced the appointment of Fred A. Jensen Co., 510 N. Dearborn Ave., Chicago 10; and D. H. Osgood Co., 4181 Oakman Blvd., Detroit 4, as sales representatives.

#### Keller Advances Two

D. F. Keller Co., Chicago, has advanced Louis J. Lewis, production manager, and two account executives, Curtis V. Schatz and J. David Pearson, to vice presidencies.

#### Tells How to Manage Sales

How to "Be Your Own Sales Manager," was the topic of Jean Kimbrough, sales manager for Nion Neoco Corp., at the November monthly meeting of the Los Angeles Printing Sales Club.

#### Hollingshead Uses Baldwin

All offset presses of the metal litho division of R. M. Hollingshead Corp., Camden, N. J., manufacturers of industrial, household and automotive chemicals, now are completely equipped with Baldwin Ink Fountain Agitators and Baldwin Water Levels, Roberts & Porter Co. stated last month.

The installations were made by Roberts and Porter Co. through its New York and Philadelphia branches. This makes five presses—three single color and two multi-color—now completely equipped with both agitators and water levels at the Camden plant. Roberts & Porter distributes Baldwin pressroom equipment through its 11 branches.

### Visit Chicago Plants

Kohl & Madden Printing Ink Corp., Chicago, was host to 45 members of the Chicago Lithographic Institute's pressmanship classes, Nov. 4. Heading the visitors were their three instructors, Clarence Smyth, I. S. Berlin Press, and two Lithographic Technical Foundation staffers, Gil Jania and Jack Jathemicz. William Madden, with others of his technical staff conducted the pressmen through the Jefferson street plant, paying special attention to facilities for manufacturing litho inks. Two weeks earlier the same group of pressmen students visited the Samuel Bingham's Son Mfg. Co. plant to learn about manufacture of printers' rollers. On Nov. 22, members of the Litho Institute's Intensive course for junior executives left for Rochester, N. Y., for post-graduate study of color separation processes in Eastman Kodak Co.'s graphic arts studies. Al Brown, general manager of the Chicago training school accompanied them.

### Craftsmen Study Offset

Facts about offset lithography that letterpress men should know were discussed at the November 18 meeting of the New York Club of Printing House Craftsmen. A panel of three men discussed management, costs and quality of offset lithography compared with letterpress. The panel men were William J. Stevens, Miehle Printing Press & Mfg. Co., Herbert Berman, LaSalle Litho Co., and Theodore Makarius, Pope & Gray. The discussion generally was non-technical. The Craftsmen meet at the Building Trades Club, 2 Park Ave.

### Ruggles Adds Press

H. L. Ruggles & Co., Chicago combination shop, has completed installation of a new Harris 17 x 22" single-color offset press, which Kenneth Ruggles, executive vice president, said replaces an older model. Business is "good," Mr. Ruggles reported, this being a reflection of the upturn in the demand for all types of advertising materials now in progress in Chicago. Recently, he said, two

more employees were added to his staff.

### Craftsmen Add Members

New members of the Chicago Club of Printing House Craftsmen include the following from litho firms: Raymond H. Bundschuh, general foreman, The Todd Co.; E. Robert Elliott, assistant production manager, American Bank Note Co.; Edward M. Harwood, supervisor, offset Dept., Stromberg-Carlson Co.; also Paul J. Hartsuch, Interchemical Corp., Printing Ink Division. Chicago Craftsmen activities in November included a field trip through the plant of Miehle Printing Press & Mfg. Co. and the annual Ladies' Night dinner-dance at the Furniture Club, Nov. 16.

## TECHNICAL BRIEFS

(Continued from Page 62)

quality line copy could be produced at that time, the quality of the continuous-tone images then produced could be called "recognizable" at best. Since 1948, research has been continued on many phases of xerography. Work, under the sponsorship of The Haloid Company, the U. S. Army Signal Corps, the U. S. Air Force, and The Battelle Development Corporation, has resulted in a considerable improvement in the art of producing continuous-tone reproductions.

\*METHODS OF PRODUCING HALF-TONE PRINTING PLATES. U. S. Patent 2,692,198. Maurice D. Whitney. *Official Gazette* 687, No. 3, October 19, 1954, page 619. 1. A method of producing a printing plate from a photographic negative of a picture, for use in a printing press, comprising: placing a transparent spacing sheet over a light-sensitive gelatin silver salt emulsion carried by a backing plate, placing a varying density halftone screen over said transparent spacing sheet, placing said negative over said screen, passing light through the super-imposed negative, screen, and spacing sheet to expose said light-sensitive emulsion, then removing said sheet and completing the exposure with the screen in contact with said emulsion, developing the exposed positive emulsion to produce a positive image of said negative thereon, thence dissolving away the unexposed light-sensitive salts from said emulsion to cause a shrinkage of the latter in correspondence with the varying densities of said image, treating with acid bichromate solution for shrinking those portions of the gelatin from which the unexposed salts have been dissolved to produce an indented printing surface on said backing sheet, then hardening the emulsion by

treating the same with a solution of potassium iodide and iodine, and thence applying printing ink to the protuberances of said surface, so that said ink will offset against a sheet brought into contact with said surface.

\*ELECTROPHOTOGRAPHY. U. S. Patent 2,690,394. Chester F. Carlson. *Official Gazette* 686, No. 4, September 28, 1954, page 880. 1. In electrophotographic apparatus, the combination with an electrophotographic plate consisting of a conductive base and a layer of photoconductive insulating material supported by said base and in contact therewith throughout an image area, of a conductive electrode in spaced parallel relation to the face of said layer in said image area, means to introduce charged particles between said layer and said electrode to develop said electrostatic latent image, and a potential source connected between said conductive base and said electrode.★★

## DRY OFFSET

(Continued from Page 41)

of plates for letterpress printing, not to mention such factors as make ready and running on the press.

Recently, we have worked out a masking technique whereby we cover all plate areas other than halftone and stage out the halftones by air pressure, spraying deep etch lacquer. This completely gets rid of the necessity of powder protection for the halftone areas. When we come out of the machine, we are ready to plate up on the press. Also, recently, with the public introduction of the Dow Process, we reoriented our thinking in this direction, but came up with the feeling that our own machine is at present superior to the fast etch machine for the purpose we require.

### Dow Process

A wedding of the two might be quite a stunt. The Dow Process opens new fields and would seem to allow a renewed grip on old ones. Many of you have no doubt had experience with this machine by this time. The machine is not in our opinion especially suited for dry offset plates and I am certain it was not intended to be. There is no doubt about it being quite feasible to modify it for dry offset. It has only size against it. As it now stands, the plates come out as flat plates and must be either molded from or run direct, though I understand in my own home town, these



plates can be curved for direct rotary printing.

In any of these cases, however, make-ready in the more or less traditional sense must be applied. We feel that we are on the right track in that we cut out a good many of the steps we used to go thru in letterpress printing on flatbeds and we cut out some we would have to do thru if we employed rotary letterpress.

#### Needed Press

Having pretty well solved the plate-making problems, it then seemed pru-

dent to purchase an offset perfecting press capable of printing 4500 sheets an hour both sides at a time or a total of 9000 impressions per hour. This was our first experience in blanket to blanket printing, that is, the sheet receiving an impression on each side as it passes between the blankets. I know of few if any sheet-fed rotary letterpresses giving this kind of net production. We start this press in a shade under four hours and we are constantly improving our time.

The same printing area on flat bed

machines required somewhere in the neighborhood of 16 hours to start. As a result of these savings plus others alluded to in the course of this talk, I think I can honestly say that it is extremely doubtful as to whether we will ever again purchase a flat bed letterpress as they are currently being built.

So, you see, we became engravers by default, the hard way. This has meant that as letterpress printers and lithographers, we have gained enough basic information with respect to working with magnesium to make our own letterpress plates should the changing situation warrant it.

#### Future Possibilities

What of the future possibilities? Well, there is nothing that cannot be overcome by the engraver and the printer working together. We, out of the circumstances, handled it a bit differently, becoming our own engravers, which I might say, required more than a little ingenuity. But as to future possibilities, the web offset press offers tremendous possibilities for the process. I am certain that more and more periodical work will flow to these tremendously fast producers, and much of it will be taken from flat bed letterpresses and not a little from the sheet-fed rotary field.


Where will it go? Where has a lot of your work gone? The same place a lot of our work went and for the same reason. We all know that offset has taken and is taking a larger percentage of available work and creating a large percentage of the new work. It will continue to go in this direction unless the engraver is alert to filling in the breach by substituting what we believe will come to be in the near future a plate far superior to anything now on the horizon in the conventional offset plate field. Men who are in the engraving business, have a chance to add the great number of offset press operators to their market. It will be interesting to see what they do about it.

#### Seek Better Printing

We frankly admit that we make a far better plate than we can print. The disparity of what we make and what we print is the subject of our

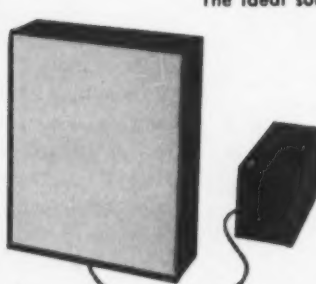
in your  
**CAMERA . . . . in your DARKROOM**

**NATSCO** MEANS BETTER LIGHT!



**NATSCO**  
OVERHEAD COLD CATHODE  
DARKROOM SAFE LIGHT

**ONLY \$58<sup>00</sup>**



**NATSCO "CCL"** GRAPHIC ARTS LIGHT

The ideal source of highly actinic  
cool  
clean  
even and steady  
Light  
... for color  
separating,  
for screening,  
for duplicating  
in the camera

Range of Sizes,  
Prices on application.

**NATIONAL STEEL & COPPER PLATE COMPANY**

700 South Clinton Street  
Chicago 7, Illinois

453 Tenth Avenue  
New York 36 New York

— A COMPLETE LINE FOR THE GRAPHIC ARTS —



intense concentration. Fortunately we know why we do not print what we make and are currently trying to solve this one. I would not be amiss in saying that the platemaking operation is actually the secondary problem; printing the plate is the primary problem, for after all, a plate of this kind can be made for us by an outside engraver if he is willing to tackle it.

I might add that the results we have to date are with only a few exceptions, the fruit of our own in-plant labors, there being no organized body of information available at the time we undertook this project, and to the best of my knowledge, there is as yet none.★★

## PHOTO CLINIC

(Continued from Page 49)

color that is seen is that which has not been absorbed.

If the two colors, between them, absorb all of the incident light, no color will be seen. Instead, the area will appear black or some shade of gray. Thus, if a true blue ink is mixed with a yellow ink, the result will not be the green normally expected but a dark neutral tone. The same will occur when mixing red and green pigments, blue and red, or blue and green. The pigment, or subtractive primaries are cyan, magenta and yellow. Cyan absorbs red and reflects both blue and green. Magenta reflects red and blue and subtracts green. Yellow reflects red and green and absorbs blue rays. The subtractive primaries are complementary to the optical primaries. The mixture of a primary color of light and its complementary will always result in white.

The mixture of a subtractive primary and its complementary will always make a neutral tone. From this it is evident that the optical and subtractive primaries are quite dissimilar and should be properly designated. A full understanding of color requires a knowledge of the physical aspects of color and light, the anatomy and physiology of color vision and the sensory aspects of color. A thorough

and authoritative treatment of the subject may be found in any one of the following textbooks.

"The Science of Color"

Committee on Colorimetry, Optical Society of America

T. Y. Crowell Company, New York  
"An Introduction To Color"

Ralph M. Evans

John Wiley & Sons, Inc., New York  
"Principles of Color Photography"

R. M. Evans, W. T. Hanson, Jr. W. L. Brewer

John Wiley & Sons, Inc., New York  
"Color In Business, Science and Industry"

Deane B. Judd

John Wiley & Sons, Inc., New York.

Q: What is the difference between the "contrast" and "gamma" of a continuous-tone negative?—E. B. F. Toronto, Canada.

A: The term contrast, in general, refers to the difference between the brightest and darkest tones of a scene, negative, etc. The greater the difference, the greater the contrast, and vice versa. In a negative, contrast refers to the density differences of the

various parts of the image. Gamma, on the other hand, refers specifically to the contrast, or density difference, established by development. The brightness range of the subject is transferred to the sensitive material through exposure. The inherent contrast of the subject can be increased or lowered by increasing or lessening the time of development. If development is such that the density differences in the negative are equal to the brightness differences of the subject, the negative is said to have a gamma of 1.0. The visual contrast of a negative is the combination of the inherent brightness range of the subject, exposure and development.★★

## MANPOWER

(Continued from Page 39)

preservation of freedom of expression and freedom of the press."

With the knowledge that it had the backing of labor, UES geared itself to a big statistical and analytical job. The industry's bargaining, of course,

# SPLCORP

## Hydro-Pressed Rigid Plastic Sheets

VINYL  
POLISHED-POLISHED  
(P.P.)

ACETATE  
POLISHED AND MATTE  
(P.M.)

POLYETHYLENE  
MATTE AND MATTE  
(M.M.)

SPLCORP is recommended as the only dimensionally stable substitute for glass, when Stripping Positives or Negatives for Multi Color Work, if close registration is desired.

A few advantages enjoyed by the Lithographic Craftsman when using SPLCORP sheets are: Easy Handling, Increased Production, Job Assurance, No Breakage, and No Storage Problems.

SPLCORP is manufactured in thickness ranging from .005" to .1", and is available in Transparent, Translucent, or Opaque, with either a Mirror Polished or Matte Finish on one or both sides.

WE ARE THE ORIGINAL PROCESSORS OF RIGID SHEETS  
IN SIZES OVER 36" x 48"

Write for samples and latest Price Lists

SCRANTON PLASTIC LAMINATING CORP.

Laminating • Press Polishing



3218 PITTSBURGH AVENUE Phone: Scranton 2-0407. SCRANTON 6, PENNSYLVANIA

## THIS IS THE POINT

Windsor & Newton's

Series **7**

"ALBATA"

Brushes for Lithographic Use

California Distributors:  
SCHWARACHER-FREY CO.,  
SAN FRANCISCO—LOS ANGELES

Canadian Agents:  
THE HUGHES OWENS CO., LTD.,  
HEAD OFFICE: MONTREAL



Finest Pure Red Sable Brush especially  
suited for lithographic uses and retouching.

Highest durability, litho strength  
and fine point—even when used with coarse pigments.

Available in sizes 000 through 14.



902 BROADWAY, NEW YORK 10, N. Y.

**HANCO  
FOUNTAIN**

**Drier**

**STIMULATOR**



**"Dry as the Desert"**

Shortens drying time! Especially valuable  
to speed-up work-and-turn jobs. Saves  
press time! Works perfectly with all  
other fountain solutions.

A small amount is a big help at ALL TIMES in your  
fountain to help drying . . . it's almost a must in  
HOT, HUMID weather to speed production and pre-  
vent offset.

### MONEY-BACK TRIAL OFFER

Order a quart or gallon today! Try it on your own presses and if  
you are not completely satisfied, return the unused portion and we  
will refund your money.

1 Quart size . . . . . \$1.75    1 Gallon size . . . . . \$6.00

**A. E. HANDSCHY CO.**



Manufacturers of Fine Letterpress and Offset Printing Inks

DISTRIBUTORS in All Principal Cities.  
Write for address of Distributor nearest you.

125 SOUTH RACINE AVENUE, CHICAGO 7, ILL.  
422 S. THIRD ST. MINNEAPOLIS 13, MINN.  
225 N. NEW JERSEY ST. INDIANAPOLIS 4, IND.

is primarily along craft lines and on a local basis. This meant that a study to be of use in collective bargaining negotiations had to be on craft lines and had to be on an area to area basis. Manpower age statistics were collected and collated by the Union Employers Section from all parts of the country.

#### Actuarial Projections

These statistics then were turned over for analysis to the Wyatt Company, an actuarial firm. The company made actuarial projections for the next 40 years for eight journeymen craft classifications for 51 local areas, as well as for the nation, making a total of 416 projections for the 40 year period.

The national projections will be distributed throughout the industry, PIA said, and each of the 51 participating areas will receive the projections applicable to its own area manpower. According to the UES Manpower and Recruitment Committee, it is hoped "that management will utilize the information made available and will work toward obtaining the cooperation of local unions to make such adjustments as are necessary in contracts to provide for the indenturing of enough apprentices to assure a sound progressive industry."

Indenturing of a sufficient number of apprentices is, of course, only one part of the task confronting the industry, the report continued. On several other fronts the industry's employer association already is moving forward. For example, the Education Council of the Graphic Arts Industry, working closely with PIA and its affiliated local groups, has introduced a number of recruitment aids. PIA, in cooperation with the United States Employment Service, also is developing aptitude tests for the various industry crafts.

#### Urges Cooperation

In addition, the Union Employers Section is urging management representatives having contracts with printing industry unions to participate fully on joint apprentice committees in order to assure the development of comprehensive training programs.

The Union Employers Section feels that with its manpower study and the strides being taken in the recruitment, selection and training fields, the commercial printing industry is making an intelligent approach toward overcoming potentially disruptive manpower shortages in unionized shops across the country.

PIA emphasized that the sole objective of the printing industry survey and actuarial projections had been to ascertain what would have to be done to maintain the present work force at a constant level in future years; there was no attempt made to take into consideration the possibility of the industry's expansion despite the fact that there has been a steady growth year after year in the industry during the past half century.★★

## EDITORIALS

(Continued from Page 35)

that stressed the size of lithography and the continuing need for it in the years to come. The outlook, then, is very optimistic for the industry.

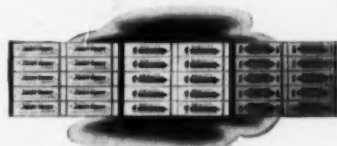
The unfortunate factor, however, is that people who buy printing frequently aren't aware of the expansion in this part of the graphic arts field and the new products and methods that are making that expansion possible. And without having figures at hand to illustrate this progress, it's a pretty hard job to convince them. An educational job is strongly indicated.

Just the other day we interviewed an important printing buyer in connection with an article for this magazine. We asked him what factors influenced his choosing between letterpress and offset for printing jobs. We were somewhat astounded when he declared that he turned to letterpress whenever "a great deal of flexibility is needed." If there are many more printing buyers who are unaware of the flexibility of litho, always considered one of its chief advantages, more people and organizations better get out and show them what they are overlooking.★★



#### "STICKLISH" SITUATIONS . . .

regularly succumb to the sales-winning ways of marvelous moistureless, self-sticking KLEEN-STIK. It's *amazin'* what "bully" business-builders you can create for your customers with this versatile adhesive — *plus* a bit of good old-fashioned imagination!



#### By Gum—What an Idea!

Here's a switch—a P.O.P. piece designed especially to be covered up! This lifelike reproduction of WRIGLEY GUM packages was created by the Wrigley art and advertising staff as a "place card" to help stock clerks in stores keep displays fully stocked with yummy Juicy Fruit, Spearmint, and Doublemint. Printed on super-stickin' KLEEN-STIK, it's simple for salesmen to apply on shelf, counter, or rack . . . yet permanent as can be! Handsome printing job beautifully executed by NEELY PRINTING CO., Chicago, and LAMCOTE laminated by ARVEY CORP. for lustre and long life. Seems a shame to hide it!



#### K-S Labels for T-V Tables

To keep competitive TV sets off their glamorous new "Tele-Carts" in dealers' showrooms, HALLICRAFTERS CO. of Chicago wanted to identify the tables as *their* products, to be used only for *their* sets. Permanent nameplates were stylishly undesirable, so Ad Mgr. RAY BERMOND "tuned" to these miniature streamers, backed with spots of ever-stickin' KLEEN-STIK. They take only *seconds* to peel-'n'-press in place . . . hold like lions . . . remove like lambs. Prestige design by RUSS DICKERSON — classy printing handled by RAY PFUM for HILLISON & ETEN CO.

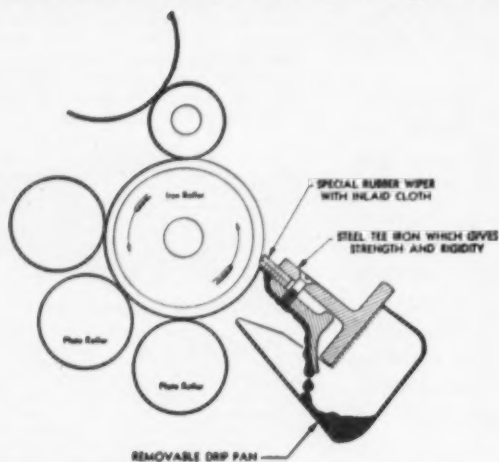
Whether your customers want "smash" or subtlety in their P.O.P., KLEENSTIK lets you "keep up" with your end of the deal. Displays for walls, windows, anywhere — you can produce 'em all . . . on a variety of quality papers available thru your regular paper source. Write for complete info and samples, including the big free KLEEN-STIK "Idea Kit."

#### KLEEN-STIK PRODUCTS, INC.

225 North Michigan Avenue • Chicago 1, Ill.  
Pioneers in Pressure Sensitive to the Trade



## Are You Interested in the **CLEANEST** and Most Complete Press Washup in the **SHORTEST POSSIBLE TIME?**



Then you will want the International Press Cleaner, which time has proven to be the best.

We now manufacture efficient cleaners for the following makes of presses — Harris Offset and Rotary, Miehle Offset and Rotary, Hoe Tin Decorating, Ebco and Webendorfer.

Leading lithographers, and metal decorating establishments have made our cleaners standard equipment in their pressrooms.

We are ready and willing to back up our claims with a 30 Day Trial of our cleaners. Write and let us know the size and make of your press.

**THE INTERNATIONAL PRESS CLEANER & MFG. CO.**  
112 HAMILTON AVENUE CLEVELAND 14, OHIO

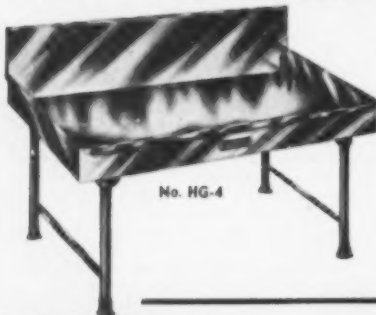
## CHECK-and YOU'LL CHOOSE

# LEEDAL

- ☒ for Efficiency
- ☒ for Quality
- ☒ for Performance

## TYPE 316 STAINLESS STEEL GRAPHIC ARTS PROCESSING EQUIPMENT

*Proved and Approved—America's Finest!*



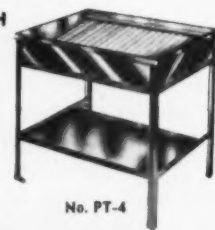
No. HG-4

### HEAVY DUTY SINKS

18 Gage, Type 316, High-Lustre Satin Finish Stainless Steel, Heli-arc welded joints. 1½" Stainless Steel drain with removable stainless steel standpipe. Underside of sink coated to minimize sweating. Stand is reinforced welded pipe leg construction with adjustable floor flanges for levelling. Available with or without back splashwall. Stand coated with rubber base, acid resisting enamel.

### OFFSET PLATE TROUGH

Sturdy gage, High-lustre satin finish Type 316 Stainless Steel. Complete with stand, perforated spraypipe—full length of trough. 1½" stainless steel standpipe. Steel storage shelf with front and back stop. Lattice drain rack of kiln dried wood, smooth rounded corners.



No. PT-4

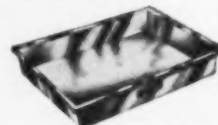


### THERMOSTATIC WATER MIXER

**FOR SPLIT ACCURACY TEMPERATURE CONTROL**  
Correct processing of film and plates insured with precise control of water temperature—automatically mixes hot and cold water to any temperature required—60-135° F. Temperature remains constant regardless of fluctuations of pressure or temperature in supply line. Failure of cold water supply instantly shuts off delivery.

### HEAVY GAGE TRAYS

18 Gage, Type 316 High Lustre Satin Finish Stainless Steel. Heli-arc welded, one piece construction. Tapered sides for nesting trays in storage. Rounded flanged rim for safe handling.



No. WHT-4

**CUSTOM BUILT EQUIPMENT MADE-TO-ORDER**—Send sketch or description for prompt quotation. No obligation  
SEE YOUR SUPPLY HOUSE REPRESENTATIVE OR WRITE TODAY FOR ILLUSTRATED CIRCULAR No. L249

**LEEDAL STAINLESS STEEL PRODUCTS, INC., 2929 So. Halsted St., CHICAGO 8, ILLINOIS**



# Classified

## ADVERTISING

All classified advertisements are charged for at the rate of ten cents per word, \$2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, \$1.00 minimum. One column ads in a ruled box, \$7.50 per column inch.

Address replies to Classified Advertisements with Box Number, care of Modern Lithography, Box 31, Caldwell, N. J.

### Help Wanted:

**A-1 PRESSMAN:** For operation of Harris two-color presses. Must be capable handling finest four-color process work. Good opportunity in first-class city in Southwest. Fine working conditions. Permanent job. Give complete details of your experience, previous connections, earning, and references. Reply will be held in strict confidence. Address Box 602, c/o Modern Lithography.

**PLATEMAKER, STRIPPER AND CAMERAMAN:** For quality two and three color work. Ideal working conditions in modern, air conditioned department. Steady work with overtime. Located in Ohio. Address Box 588, c/o Modern Lithography.

**DOT ETCHER** thoroughly experienced in modern trade shop techniques for fine color reproduction. Must be qualified to take care of two other dot etchers. State qualifications and last ten years employment in first letter. So. Cal. union trade shop. Address Box 589, c/o Modern Lithography.

**CAMERAMAN** to do color contact separation work and operate enlarger. Must be thoroughly experienced in modern masking techniques. State qualifications and last ten years employment in first letter. So. Cal. union trade shop. Address Box 590, c/o Modern Lithography.

### GENERAL MANAGER PRINTING — PAPER CONVERTING

MIT graduate Chem., Engineering & Bus. Adm., young (41), aggressive and lucratively employed but with advancement blocked. Thoroughly experienced as Production Mgr., Asst. to President (past 15 yrs.), medium sized business with \$5,000,000 sales. Conditioned to managing with very low overhead in mass production of consumer packaged paper products. Wide experience as manager and businessman in the technical, purchasing, production, cost, merchandising, sales and coordinating functions with style products in extremely competitive fields. Complete background in color lithography, greeting card publishing, paper box and envelope mfg.

BOX NO. 601

**FIRST CLASS LITHO COLOR CAMERAMAN** for separation work in full range of negative and positive color work in trade shop. Must be familiar with modern masking techniques. Operate modern A.T.F. 32" camera. State qualifications and last ten years' employment in first letter. Medium size union shop in So. Cal. Address Box 591, c/o Modern Lithography.

**FIRST CLASS LITHO COLOR STRIPPER** to supervise and act as working foreman in five man stripping department. Must be capable and experienced craftsman. State qualifications and last ten years' employment in first letter. So. Cal. union trade shop. Address Box 592, c/o Modern Lithography.

### MEN WANTED — POSITIONS OPEN

Superintendent — Business Forms NIGHT  
Rubber Plate & offset rotary press exp. N. Y. \$7,800  
Asst. Prod. Mgr. — Offset-Letterpress  
estimating exp. necessary OHIO \$4,700-5,000  
Superintendent — Offset-Letterpress EAST \$7,000-10,000  
Foreman — Litho Camera Plate MIDWEST \$7,000-8,000  
& Stripping MIDWEST \$7,000-8,000  
Salesman — Offset Letterpress MIDWEST \$7,500  
Estimator — Production Men MIDWEST \$5,000-6,000

### GRAPHIC ARTS EMPLOYMENT SERVICE

Helen M. Winters, Mgr.  
Dept. M-12, 307 E. 4th Street  
Cincinnati 2, Ohio

List Your Confidential Application With Us

### OFFSET SUPT. AVAILABLE

25 years experience in lithography: 15 years as Superintendent, Platemaker, Stripper; 10 years experience on 1 and 2 color presses. Desires full charge position. 42 years old; married; excellent lithographer. Address box 610 c/o MODERN LITHOGRAPHY.



the RELIABLE Supplier  
to the Lithographer

for SERVICE call Bryant 9:8480  
EASTERN GRAPHIC ARTS SUPPLY CO.  
254 W. 31st STREET • N. Y. C.

**WANTED:** First class stripper-printer and platemaker with experience in book work. Some camera ability helpful. Not over 40. Fine future for able, ambitious man in growing trade shop. Mid States location. Write fully first letter. Address Box 593, c/o Modern Lithography.

**LITHOGRAPHIC 2-COLOR PRESSMEN, CAMERAMAN, STRIPPER AND PLATEMAKER** needed for established plant in Miami, Florida. Good opportunity. Permanent. Top notch men only. Address Box 594, c/o Modern Lithography.

**EXPERIENCED LITHOGRAPHER AND PLATEMAKER**, with initiative and executive ability desiring out of office position with established firm and future opportunity. Write giving full particulars, references and salary received and expected in first letter. Address Box 605, c/o Modern Lithography.

**CHEMIST** — Knowledge of Graphic Arts, litho platemaking, emulsions, developers, diazo compounds, etc. Give full details in answer as to background, experience, references, present salary and salary expected. Address Box 606, c/o Modern Lithography.

**WE NEED TWO INK SALESMEN:** Good opportunity in Metropolitan N. Y. area for right men with established followings in lithographic and/or letterpress, carton, etc. fields. Straight commission, straight salary, or salary plus bonus arrangement. Complete replies held in full confidence. Address Box 609, c/o Modern Lithography.

**DOT ETCHER AND RETOUCHER:** Thoroughly experienced in process color work, permanent position in a modern progressive plant in Ohio. State experience, age, salary desired and other details in letter. Address box 608, c/o Modern Lithography.

### Situations Wanted:

**EXECUTIVE SECRETARY:** 11 years lithography; knowledge bookkeeping, administrative detail, stenography, own correspondence, statistical typing; mature; \$70-75; Metropolitan New York. Address Box 587, c/o Modern Lithography.

**ENGINEERS:** Consultants on printing, designers of rotogravure, flexographic and gravure offset presses for industrial applications. If your printing is not up to standard, costs too high or you have a special problem, consult us, our services are available on a yearly or project basis, E. A. Crawford Co., Box 216, Edgewood Station, Providence, R. I.

**WANTED:** A progressive Lithographer who is looking for a technical specialist to assume responsibility for plant improvement in methods, standards and control, with emphasis on color. Box 603, Modern Lithography.

(Turn the Page, Please)

# A COMPLETE SERVICE!



**ADVERTISING ART**  
**COMMERCIAL PHOTOGRAPHY**  
**LETTERPRESS PLATES**  
**OFFSET PLATES**  
**ROTOGRAVURE PLATES**

*Makers of Fine  
Printing Plates*

## GRAPHIC ARTS CORPORATION OF OHIO

110 OTTAWA STREET • TOLEDO 4, OHIO • PHONE GARFIELD 3781

**DETROIT BRANCH**  
825 West Elizabeth Street  
Woodward 2-9122

**CHICAGO**  
222 West Adams Street  
RAndolph 6-5383

**NEW YORK**  
122 E. 42nd Street  
CXford 7-2387



**WE HAVE NO  
QUARREL  
WITH THOSE WHO  
SELL FOR LESS—**

**THEY KNOW WHAT THEIR  
STUFF IS WORTH!**

**AMERICAN GRADED SAND COMPANY**  
Chicago 13, Illinois Paterson 4, New Jersey



**TECHNICAL SPECIALIST:** With international reputation and experience available after December 1954. Will consider technical representative and trouble-shooter for supplier, or technical director of progressive plant. Box 604, *Modern Lithography*.

**SITUATION WANTED:** Bindery man, age 40, married, 15 years experience in folding, cutting and general bindery work. Address Box 585, c/o *Modern Lithography*.

**ARTIST:** Experienced in variety of practical reproduction techniques: dot etching, retouching and masking. Excellent art and technical background. Capable creating efficient, quality color department. Desires opportunity to establish with progressive company, preferably western locale. Address Box 586, c/o *Modern Lithography*.

#### For Sale:

Buy Surplus printing presses equipment supplies from U. S. Government. Send \$1.00 for Government Surplus Bulletin to Surplus Bulletin, Box 213B, East Hartford 8, Conn.

**OFFSET FOR SALE:** 1-Rolled perfecter offset with folder delivery folding to 8½x11. Built by A.T.F.; 1 SSL Harris 22x34 offset press; 2-20x26 Simplex Presses. Knight Press, 4 N. Broadway, Baltimore 31, Maryland. Eastern 7-4444.

2/0 Miehe 41x54 Cylinder Press with Cross Feeder, Pile Delivery. 220/60/3. Good Condition. Address Box 595, c/o *Modern Lithography*.

36x48 Harris S7L Offset Press. D.C. Equipment. Address Box 596, c/o *Modern Lithography*.

#### High Gloss Plastic Coating

Lacquering-Varnishing-Gumming

Best Quality & Service

PAPER CONVERTING & FINISHING CO.

118 N. Ada St., Chicago 7, Ill.

Phone Haymarket 1-7904

#### MUST MOVE

Harris 42x58 2-color Model LSK—1942

Harris 35x45 2-color Model LST—1949

Harris 35x45 1-color Model LSS—1950

Harris 22x34 1-color Model LTN—1947

Webendorfer 22x29—1950

LITHOGRAPHIC EQUIPMENT CORP.

CASEY JONES

500 Fifth Ave. N.Y.C. BRyant 9-1133

#### HERBERT P. PASCHEL

##### Graphic Arts Consultant

Methods Analysis

In-plant Training

Trouble-Shooting

Color Correction Systems

118 East 28th St.—New York 16, N. Y.

MURray Hill 6-5566

41x54 Harris One-Color Offset Press, Model LB. A.C. Equipment. Address Box 597, c/o *Modern Lithography*.

44x64 Harris One-Color Offset Press, Model LF. D.C. Equipment. Address Box 598, c/o *Modern Lithography*.

**FOR SALE:** 1-31 in Levy 133 line circular half-tone screen, with holder, same in new condition, larger camera is being installed. Address box 611, c/o *Modern Lithography*.

**FOR SALE:** 1 Zarkin Plate Graining Machine. Inside dimensions 48" x 60". Machine in good workable condition. Will accept any reasonable offer. Address Box 607, c/o *Modern Lithography*.

#### Miscellaneous

**WANTED:** HARRIS 42 x 58 (or similar size) single-color offset press. Must be in excellent condition, and able to stand engineer's examination. Please state price, year erected, and give hours run since new. Address Box 599, c/o *Modern Lithography*.

**WANTED:** MH-3 or MH-4 Photo Composing Machine. Advise best cash price, availability, for prompt action. Also interested in Craftsman Line-Up Table, size not important. Address Box 600, c/o *Modern Lithography*.

Color separations for process offset: Halftone positives, negatives made electrically controlled color corrected including dot etching, as low as \$99.00 a set, up to 3½ x 5½ size, made in all sizes, proofs available. Color copper cuts for letterpress: Color corrected copper plates including progressive proofs in all sizes up to postcard size for only \$99.00—quick service. Send for free samples and price list "4." Moss Photo Service, Inc., 350 West 50th Street, New York 19, N. Y. Serving accounts "to satisfy" from coast to coast since 1935.

#### Chart Shows Screen Tints

A new "Screen Chart and Color Visualizer" has been prepared by a Minneapolis publisher to give lithographers and photoengravers and their customers a reliable common basis of reference for discussing and ordering different screen tint values in any of the popular halftone screens.

The chart, consisting of 104 pages, shows how 10 basic screen tints, from extremely light to solid, look when printed.

Information is available from Art Instruction, Inc., 500 South 4th Street, Minneapolis 15, Minn.

## Trade Events

Printing Week, January 16-22, 1955. Everywhere.

National Assn. of Litho Clubs, annual convention, May 6 and 7, Schroeder Hotel, Milwaukee.

Technical Assn. of the Graphic Arts, annual meeting, Boston, May 9-11, 1955, Somerset Hotel.

Research & Engineering Council of the Graphic Arts Industry, annual meeting, Parker House, Boston, May 11-13.

Lithographers National Assn., annual convention, June 20-23, Lake Placid Club, Lake Placid, N. Y.

International Assn. of Printing House Craftsmen, annual convention, August 7-10, Netherland Plaza Hotel, Cincinnati.

National Assn. of Photo-Lithographers, annual convention and exhibits, September 21-24, Statler Hotel, Cleveland.

## Litho Schools

CANADA—Ryerson Institute of Technology, School of Graphic Arts, 50 Gould St., Toronto, Ont., Canada.

CHICAGO—Chicago Lithographic Institute, Gleason House, 1800 S. Prairie Ave., Chicago 16, Ill.

CINCINNATI—Ohio Mechanics Institute, Cincinnati, Ohio.

LOS ANGELES—Los Angeles Trade Technical Junior College, 1646 S. Olive St., Los Angeles 15, Calif.

MINNEAPOLIS—Dunwoody Industrial Institute, 818 Wazata Blvd., Minneapolis 3, Minn.

NASHVILLE—Southern School of Printing, 1514 South St., Nashville, Tenn.

NEW YORK—New York Trade School, Lithographic Department, 312 East 67 St., New York, N. Y.

OKLAHOMA—Oklahoma A & M Technical School, Graphic Arts Dept., Okmulgee, Okla.

ROCHESTER—Rochester Institute of Technology, Dept. of Publishing & Printing, 65 Plymouth Ave., South Rochester 5, N. Y.

PHILADELPHIA—Murrell Dobbins Vocational School, 22nd and Lehigh, Philadelphia, Pa.

PITTSBURGH—Carnegie Institute of Technology, Dept. of Printing Administration, Pittsburgh.

SAN FRANCISCO—City College of San Francisco, Ocean and Phelan Aves., Graphic Arts Department.

ST. LOUIS—David Ranken, Jr. School of Mechanical Trades, 4431 Finney St., St. Louis 8, Mo.

WEST VIRGINIA—W. Va. Institute of Technology, Montgomery, W. Va.

## Trade Directory

Lithographic Tech. Foundation  
Wade E. Griswold, Exec. Dir.  
131 East 39 St., New York 16, N. Y.

National Association of Photo-Lithographers  
Walter E. Soderstrom, Exec. V. P.  
317 West 45 St., New York 36, N. Y.

Lithographers National Association  
W. Floyd Maxwell, Exec. Dir.  
420 Lexington Ave., New York 17, N. Y.

National Assn. of Litho Clubs  
Frank H. Mortimer, Secy.  
5917 33rd St., N. W.  
Washington 15, D. C.

Printing Industry of America  
James R. Brackett, Gen. Mgr.  
719 15th St., N. W. Washington 5, D. C.

International Assn. of Printing House Craftsmen  
P. E. Oldt, Exec. Sec'y.  
307 E. Fourth St., Cincinnati 2.



# Schultz

## DEEP

## ETCH

# chemicals

Proved dependable and economical in leading litho plants for more than a decade. You too will find it profitable to standardize on Schultz Chemicals for all your deep etch requirements.

### H. J. SCHULTZ

1240 W. MORSE AVE. CHICAGO 26, ILL.

Your Proofs  
prove it pays to

*Specify*



Available  
through All  
Leading  
Grainers

Pressmen know LITH-RITE plates are performance-right. That uniform surface quality and temper—that freedom from sub-surface faults—means clearer overall impressions every time. Fewer stoppages too, because LITH-RITE won't "flake off" during the run.

**The American Zinc Products**

A Division of BALL BROTHERS CO., INC.  
GREENCASTLE, INDIANA

99 PARK AVE., NEW YORK • 3428 W. 48th PL., CHICAGO

**AMERICA'S MOST MODERN  
PLATE GRAINING PLANT**



**IN THE HEART OF AMERICA  
TO SERVE AMERICA BETTER**

WESTERN'S modern daylight plant was specially designed and equipped for plate graining operations.

WESTERN'S skilled craftsmen are specialists. Their ability is at your disposal.

WESTERN'S 28 years experience is your assurance of better printing results.

WESTERN'S location gives you the advantage of direct truck delivery from St. Louis, Mo. to your door.

*Complete Stock of New Zinc and Aluminum Plates  
for Immediate Delivery*

**WESTERN LITHO PLATE  
AND SUPPLY COMPANY**

1927 SO. THIRD ST. • Phone CH. 1-6683 • ST. LOUIS 4, MO.



## Screeners Advance in Mechanization, Drying

**S**CREEN process printing is moving further into mechanization and drying equipment according to indications at the sixth annual convention of the Screen Process Printing Assn. at the Jefferson Hotel, St. Louis, Oct. 30-Nov. 2.

The material and equipment show at the convention showed not only the growth and development of silk screen but also that it has become a recognized field by many firms of national importance. Exhibitors included such companies as Kodak, DuPont, Minnesota Mining, Falulah, and Sinclair & Valentine. At the St. Louis show these firms and many others showed their products.

Victor Strauss, long active in the field reports that the most interesting part of the show was the mechanical printing and drying equipment. Silk screen had experienced a rather hectic phase of mechanical development in the recent past. This phase seems to be over now. In St. Louis one saw no radically new machines, but the accent was on improvement and consolidation of designs embodying already known developments, he said.

Forced drying by means of great heat has been completely abandoned during the last year. The drying machines shown at St. Louis were either of the low temperature convected air kind or variations of the wicket. Three firms, Advance Process Supply Co., Chicago, Kwikit Co.,

Chicago and M & M Research Engineering Co., Milwaukee, showed wickets. Wickets are manufactured in many different sizes for hand as well as machine printing and have proved themselves in practical shop operation as efficient and satisfactory, observers said. In some cases the wickets are combined with convected heat and air dryers, in others, drying takes place without any heat whatsoever. Even though the wicket is rather new in the screen industry, it seems to be the consensus of the leading firms that it is the best solution for the drying problem, at least for the time being.

General Research & Supply Co., Grand Rapids, Mich., showed a printing unit which, combined with a mechanical feeder (a joint development of General Research & Dexter) produces 2,500 sheets per hour. This printing unit can be connected to a mechanical dryer, also developed by General Research & Supply. Such an automatic installation will feed, print and dry 2,500 sheets per hour just as automatically as do processes customary in any other printing process, Mr. Strauss reports.

Milton Grant, Silk Screen Process, Inc., Cleveland, was elected president of the SPPA.

### Canadian Companies Expand

Recent installations of Harris equipment in Canadian companies

were announced in November. Bulman Bros., Ltd., Winnipeg, added two 17 x 22" presses. Hughes & Wilkins, Ltd., Hamilton, Ontario, put in a 21 x 28" offset press, while a 17 x 22" press was installed in the plant of McBee Co., Ltd., Toronto.

### Mallinckrodt Appoints

Three promotions in the sales department were announced in November by Joseph Fistere, president of Mallinckrodt Chemical Works, St. Louis. G. C. Bradshaw was made director of sales research, Walter S. Keutzer was named western division sales manager and Warren F. Michener was appointed assistant western division sales manager.

Before being named director of sales research, Mr. Bradshaw was western division sales manager for Mallinckrodt for seven years. He joined Mallinckrodt in 1925 and in 1936 he was made assistant western division sales manager. Mr. Keutzer joined the company in 1910 and Mr. Michener in 1946.

### Adds 22 x 34 in Chicago

Colorgraphic, Inc., Chicago, has installed a new Harris 22 x 34" 2-color offset press, which brings to four the total of presses now operated by this 15-year-old subsidiary of the Meyercord Co. Colorgraphic handles offset work for the parent company, Fred DeBrower, treasurer, said, and also does advertising printing of all types for its general customers.

**our story  
is simple . . .**

Quality Covers providing  
the utmost in printability  
and strength.



**THE UNITED MFG. CORP.**

Converters of Cloth and Paper • Reading, Pa.

29 YEARS OF OFFSET PLATE MAKING AND PLATE GRAINING

## CHICAGO LITHO PLATE GRAINING CO.

COMPLETE OFFSET PLATE SERVICE

TELEPHONE  
STATE 2-8590

214-216 NORTH CLINTON STREET, CHICAGO (6)

### PERFECTION DISTRIBUTORS of GUMMED PAPER

have more useful information  
**ABOUT GUMMED  
PRINTING PAPER**  
than distributors  
of any other brand.

**MAKE US PROVE IT!**

**PAPER MANUFACTURERS COMPANY**

Main office and plant: Philadelphia 15, Pa.

### How MUCH Would It Cost You? How LONG Would It Take You?

To (1) F O L D ... 65,000 ... 8 x 10 ... 16-Page Booklets  
To (2) B I N D ... 65,000 ... 8 x 10 ... 16-Page Booklets  
To (3) T R I M ... 65,000 ... 8 x 10 ... 16-Page Booklets

If YOU Have the Latest "Gold-Mine" BAUM-FOLDER ... One Person Could Do It ALL in One 8-Hour Day ... Just as a Minneapolis Firm Is Doing It on Their New BAUM Roll-A-Way.

Forgive Our Presumption (?) for Feeling Your FOLDING-PROFIT Is Our Business. We Are Yours to Command to Install Any Size Checked Below on the Most Nominal ... Small ... Low Initial ... With Only Simple Interest ... No Finance Charge ... Just Fill In ... Tear Out ... Mail This Advertisement ... TODAY.

14 x 20 17½ x 22½ 22 x 28 25 x 38 30 x 46-60

Firm Name .....

Mr. ....

Address .....

City & State .....

RUSSELL ERNEST BAUM, INC.  
615 Chestnut St., Phila. (6) Pa. LO 3-8164

### The Litho Industry Prefers



**LITHOGRAPHERS PLATES**

**World Famous for  
Superior Quality**

A product of 82 years of experience

**ILLINOIS ZINC COMPANY**

Chicago 32 • New York 20  
2959 West 47th Street • 630 Fifth Avenue  
Lafayette 3-1600 Circle 7-0874

Modern Lithography  
Box 31, Caldwell, N. J.

Send Modern Lithography, starting with the current issue, as indicated.

1 Yr. \$3 ☐ 2 Yr. \$5 ☐ Payment Enclosed ☐  
Send a Bill ☐

Foreign Rates Higher (see page 5)

Name .....

Street .....

City ..... Zone ..... State .....

# Index to Articles Published in Modern Lithography in 1954

With titles, authors, month and page  
listed under general subject headings,  
and a cross index of authors' names.

<b>Management</b>		<b>Mo.</b>	<b>Pg.</b>	<b>Metal Lithography</b>		<b>Mo.</b>	<b>Pg.</b>
Is Offset Suited for Magazine Production?, by Irving Simon.....	Feb.	34	Coating Wickets and Cleaning Ovens, by M. A. Glaser .....	Jan.	50		
Cost Study Shows Advantages of Offset for Quar- terly of 110,000 Run, by P. R. Russell.....	Feb.	37	Some Aspects of High Speed Litho Coating, by C. H. Groff.....	Feb.	85		
Production Control, by Jacques Tisne.....	Feb.	43	Litho and Tin Deterioration Traced to Canning Process, by A. E. Mudra and R. Royce.....	Mar.	63		
Coordination: Sales, Production, Finance, by J. P. Hedrick .....	Mar.	36	Work Started by American Can on Denver Plant.....	Apr.	65		
Employment Remains High in Lithography.....	Mar.	42	Bearer to Bearer Printing on a Metal Press, by Harry Quinn .....	Apr.	65		
Achievement on Long Island, by Walter E. Soder- strom .....	Mar.	46	Metal Decorating Awards Announced.....	May	91		
Combination of Processes Produces Fast Annual Report .....	Mar.	48	Sees Greatest Potential in Soft Drink Cans.....	June	97		
Broad Training Needed in Lithographic Skills, by Charles Shapiro.....	Apr.	36	Lithographed Premiums Shown at Chicago.....	June	101		
An Analysis of the Negotiations and Strike at Western .....	Apr.	47	Crown Can Plans \$4½ Million Philadelphia Plant.....	June	103		
Should We Rent or Build the New Plant?, by Wal- ter E. Soderstrom.....	May	44	Faster Equipment and Longer Lines, by Fred S. Bailey .....	July	53		
Color, by H. Bettye Stout.....	June	48	Flat Top Soft Drink Cans in Production.....	Aug.	61		
Trade Shops, Vital Segment of the Industry, by Dante Mazzocco .....	June	54	A Review of Progress in Metal Decorating Equip- ment, by Christian F. Scheehle, Jr.....	Sept.	87		
Modern Management in Smaller Plants, by L. K. Straszewicz .....	July	38	Care of Coating Rollers, by James T. Keating.....	Oct.	67		
Net Profit in Lithography Analyzed; Survey Shows Narrow Margin, by W. Floyd Maxwell.....	Aug.	32	Vinyl Coatings in Metal Decorating, A. C. Schultz .....	Dec.	69		
How You Can Advertise Litho by Charles V. Morris .....	Oct.	48					
How To Plan for New Equipment, by Milton Hud- ders .....	Oct.	50	<b>Copy Preparation and Design</b>	<b>Mo.</b>	<b>Pg.</b>		
Purchasing Lithographic Materials, Supplies and Equipment, Joseph F. Matlack.....	Nov.	37	Offset Job Wins Carton Award.....	Apr.	41		
Lithographic Costs, Yesterday, Today and Tomor- row, Saul L. Blackman.....	Nov.	40	Babies, Salt, Eyeglasses on Award Winning Posters .....	Apr.	44		
Safety Programs in Graphic Arts Gain Momen- tum, H. H. Slawson.....	Nov.	42	LNA Award Winners.....	May	34		
Will There Be Enough Man Power?.....	Dec.	39	Litho Leads in STA Awards.....	May	40		
<b>Sales and Promotion</b>	<b>Mo.</b>	<b>Pg.</b>	<b>Camera, Photography, Color Correction</b>	<b>Mo.</b>	<b>Pg.</b>		
Tips on Offset Sales Management, by A. J. Fay.....	Jan.	35	Elements of Process Color Reproduction, Part 7, Conclusion, by Andy Perni.....	Jan.	46		
Denver Litho Firm Finds Mottoes Effective as Advertising Promotion .....	Jan.	47	A Practical Method for Determining Color Cor- rection Masking, by H. Brent Archer and War- ren L. Rhodes.....	May	98		
Printing Week Round-Up.....	Feb.	50	Photo Composing 4, Plate Registration, by Charles Latham .....	July	40		
Coordination: Sales, Production, Finance, by J. P. Hedrick .....	Mar.	36	Is Your Gallery Ready for Color?, by D. Thomas Kennedy .....	Aug.	44		
Graphic Arts Sales Chiefs See '54 as Top Volume Year .....	Mar.	44	The Concept of the Characteristic Curve, by War- ren L. Rhodes.....	Aug.	48		
Achievement on Long Island, by Walter E. Soder- strom .....	Mar.	46	Photographic Clinic, Herbert P. Paschel.....	Nov.	45		
Offset Job Wins Carton Award.....	Apr.	41	Photographic Clinic, Herbert P. Paschel.....	Dec.	49		
Promotion and Creative Selling, by Scott L. Wolff, Jr. ....	Apr.	42					
Babies, Salt, Eyeglasses on Award Winning Posters .....	Apr.	44	<b>Platemaking, Stripping, Proving</b>	<b>Mo.</b>	<b>Pg.</b>		
LNA Award Winners.....	May	34	Academic Lithography, Edwards Bros., Part 1, by Haviland Reves.....	Jan.	32		
Litho Leads Field in STA Awards.....	May	40	Academic Lithography, Part 2.....	Feb.	44		
Estimates — Are they accurate?, Sales Specs — Are they adequate? by Harold Drury.....	Aug.	41	Some Thoughts on Plate Lacquers, by Grant C. Beutner .....	Jan.	48		
Evaluating Color Copy for Estimating, by Harold Drury .....	Sept.	50	Some Tips on Using Vacuum Frames.....	Jan.	54		
The Salesman's Place in the Printing Dollar, by John L. Hallstrom.....	Oct.	46	Photo Composing, Part 1, Introduction, by Charles W. Latham .....	Feb.	38		
Why We Buy Lithography — "Know your process, know your shop".....	Oct.	51	Photo Composing (2), The Layout, by Charles W. Latham .....	Mar.	38		
Estimates Accurate? Sales Specs Adequate? Credit Checking and Production Control, Part 3, conclusion by Harold Drury.....	Oct.	77	Photo Composing (3), Operator's Procedure.....	Apr.	39		
Self Advertising Awards Announced.....	Dec.	46	Photo Composing (4), Registration.....	May	48		
			Photo Composing (5), Plate Registration.....	July	40		



# LITHO PLATE graining

Zinc and Aluminum Plates  
Multilith-Davidson Plates  
Lithographic Supplies

LITHO  
PLATES

THE PHOTO-LITHO  
PLATE GRAINING CO.

1200 S. BAYLIS ST., BALTIMORE 24, MD.  
Telephone: Dickens 8320

**BM**

**HALFTONE SCREENS**

BLACK AND WHITE AND COLOR

*in use around the world*

Many standard sizes and lines available  
for immediate delivery.

Make your 24" camera do the job of a  
32" with a set of BM angle screens.

A set of 20" x 24" four angle screens will  
make as large a job in a 24" camera as  
will a 23" circular screen in a 32" camera.

*ask your*  
**GRAPHIC ARTS SUPPLIER**



**BM**

**HALFTONE TINTS**

Your Customers want  
**STANDARDIZED BM TINTS**

Keep complete selection on hand at all times.  
Don't waste valuable camera time making  
tints. 60 to 133 line in 6 tone values.

**Buckbee Mears Co.**  
SAINT PAUL 1, MINNESOTA

## NEG-O-ETCH AN AID FOR PHOTO OFFSET STRIPPERS

No need to scratch film emulsion for fit in order to lay tints. Merely  
remove unwanted work with **NEG-O-ETCH**, right on the flat. Then  
opaque back to exactly where you want. No more wasting time,  
sending negatives back to camera. Remove work from negatives or  
positives this simple way. A one time use will save you more than  
its price.

PRICE \$2.00 a 4 oz. bottle

**LITH-O-GRAPH PRODUCTS CO.**  
520 Fifth Ave., New York 36, N. Y.

The Right Roller right away



**SAM'L BINGHAM'S SON MFG. CO.**

MANUFACTURERS OF

**PRINTERS' ROLLERS**

**HUMIDITY  
PROOF!**



**GRUMBACHER  
PATENT BLACK  
MASKING INK**

- adheres to acetate and vinyl
  - extra black...extra opaque
  - non-reflective high gloss
  - for masking, overlays, drawings
  - use on paper, cloth or plastic
- NEVER TACKY...EVEN IN HUMID  
WEATHER...ALWAYS READY TO USE
- use with pen, brush or ruling pen
  - thins with water...washes off  
without staining the acetate

SEND FOR FREE SAMPLE JAR  
**M. GRUMBACHER**  
INC.

477 W. 33rd St., N. Y. 1, N. Y.

FOR  
FINEST  
LITHOGRAPHY

*"Lithograin"*

Lithograin assures you  
careful and competent handling of all your  
graining and regaining requirements. It also  
features "Cronak" processing of zinc plates  
which gives cleaner and longer press runs. Zinc  
and aluminum offset plates supplied in all sizes.

**TOLEDO LITHOGRAIN AND PLATE COMPANY**  
PHONE GARFIELD 3576 • 714 WASHINGTON • TOLEDO 2, OHIO



How to Check up on Blind Plates.....	Feb.	47
The LTF Post-Phosphate Treatment.....	Feb.	47
Presensitized Offset Plates, by Frederick E. Brin-		
nick .....	Mar.	52
How They Do It on Stone.....	May	42
Presensitized Plates, How to Run Them.....	June	51
Color Stripping on Glass, by Clayton Reece.....	June	52
Trade Shops, Vital Segment of the Industry, by		
Dante Mazzocco .....	June	54
How Warm is the Rinse Water: Plate Tempera-		
ture Should Be Checked.....	June	79
Review of Offset Plate Developments, by Harry		
Mueller .....	July	36
Photo Composing—4, Plate Registration, by		
Charles Latham .....	July	40
Photo Composing—5, Multiple Negatives, by		
Charles Latham .....	Aug.	45
The Concept of the Characteristic Curve, by War-		
ren L. Rhodes.....	Aug.	48
Photo Composing — 6, Contact by Charles W.		
Latham .....	Sept.	57
Presensitized Plates Spark Panel Discussion.....	Oct.	45
Photo Composing — 7, by Charles W. Latham.....	Oct.	52
Photo Composing, Room Layout, Part 8, Charles		
Latham .....	Nov.	57
Photo Composing, Maintenance, Part 9 (Conclu-		
sion), Charles Latham.....	Dec.	45

#### Presswork, Ink, Varnishing

Mo. Pg.

Varnishing by Roll Coating, Part 2, by H. Audino.	Jan.	37
Varnishing by Roll Coating, Part 3.....	Feb.	40
Procedures in Offset Makeready, by Andrew Don-		
aldson .....	Jan.	42
How the GPO Controls Static, by Eugene P. Er-		
nest .....	Jan.	44
Controlling Ink and Water on the Offset Press.....	Jan.	54
Counter-Etching; Ghost Images, by Theodore		
Makarius .....	Feb.	53
Copper Plating Solution for Rollers Improved by		
Foundation .....	Feb.	63
True Reproduction of Image, by Theodore Makari-		
us .....	Apr.	46
Presensitized Plates, How to Run Them.....	June	51
Hints on Dampers and Blankets, by Theodore		
Makarius .....	June	75
How to Take Care of Leather Rollers.....	July	61
Inking on the Offset Press by Theodore F. Makari-		
us .....	Aug.	58
Control of Fountain Solutions, by Theodore F.		
Makarius .....	Sept.	55
Use of Radioisotopes for Measuring Ink on Press		
Rollers, by Paul C. Aebersold and Charles E.		
Crompton .....	Oct.	57
Ink-Water Balance in Printing, George W. Jor-		
gensen .....	Dec.	51

#### Paper

Mo. Pg.

LTF Improves Accuracy with the Paper Hygro-		
scope .....	Sept.	58

#### Historical

Mo. Pg.

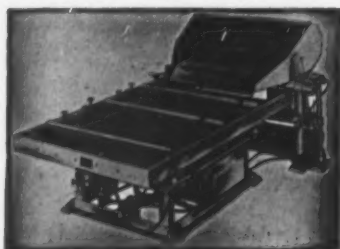
Permanent Litho Exhibit Opens at Smithsonian..	Jan.	53
Versatile Firm Nears 90 Year Mark (Marshall &		
Bruce Co.) .....	Mar.	71
Stone Lithography in 1954.....	Apr.	34
How They Do It on Stone.....	May	42
Eight Years of NALC Progress.....	May	71

#### General (Including Convention Reports) Mo. Pg.

Academic Lithography (Part 1), Edwards Bros.,		
by Haviland Reves.....	Jan.	32
Academic Lithography, Part 2.....	Feb.	44

Permanent Litho Exhibit Opens at Smithsonian..	Jan.	53
Is Offset Suited for Magazine Production?, by		
Irving Simon .....	Feb.	34
Cost Study Shows Advantages of offset for Quar-		
terly of 110,000 Run, by P. R. Russell.....	Feb.	37
Production Control, by Jacques Tisne.....	Feb.	43
Vancouver College Training Offset Men.....	Feb.	49
Printing Week Round-up.....	Feb.	50
Air Conditioning at Palm Bros., by William H.		
Junker .....	Feb.	54
Employment Remains High in Lithography.....	Mar.	42
Schultz Heads Web Offset Section Formed by		
PIA .....	Mar.	45
Achievement on Long Island (Corydon M. John-		
son), by Walter E. Soderstrom.....	Mar.	46
Combination of Processes Produces Fast Annual		
Report .....	Mar.	48
Landenberger Elected President of LTF.....	Mar.	50
550 Attend Gravure Technical Meeting.....	Mar.	55
Stone Lithography in 1954 (part 1).....	Apr.	34
How They Do it on Stone (Part 2).....	May	42
Broad Training Needed in Lithographic Skills, by		
Charles Shapiro .....	Apr.	36
Chicago Union and Employers Launch Dermatitis		
Research .....	Apr.	45
An Analysis of the Negotiations and Strike at		
Western .....	Apr.	47
Record Crowds at Point of Purchase Show.....	Apr.	49
LNA Award Winners.....	May	34
The Competition for Process Color Elementary		
Textbooks, by Keith L. Johns.....	May	65
Meet the Litho Club Presidents.....	May	75
Bureau of Engraving and Printing: Offset in the		
Multi-Billions .....	June	38
Litho Club Activities Streamlined; Three Clubs		
Added .....	June	43
Color, by H. Bettye Stout.....	June	48
Trade Shops, Vital Segment of the Industry, by		
Dante Mazzocco .....	June	54
TAGA Elects Erikson; Abstracts Given.....	June	56
	July	43
Research & Engineering Council Elects Davis....	June	65
Narrow Profit Margin Studied as LNA Seeks Bet-		
ter Litho Management.....	July	28
457,000 at DRUPA Exposition.....	July	42
NAPL Outlines September Meeting.....	July	65
67-Year-Old Nashville Firm in New Plant, by		
P. R. Russell.....	July	71
Offset Comes of Age in the GPO, by Raymond		
Blattenberger .....	Aug.	35
Offset Clinic Climaxes S. W. Exposition.....	Aug.	39
Offset vs. Communism, by Congressman Chas. B.		
Brownson .....	Sept.	42
Offset Magazines for Negroes Reach 345,000 Cir-		
culation, by Haviland F. Reves.....	Sept.	46
Craftsmen Elect Mahoney; Membership Reaches		
13,739 .....	Sept.	52
NAPL Elects Howard; Panels Feature Program..	Oct.	38
Honolulu Lithograph Co. Runs Integrated Plant		
	Nov.	34
Over 300 at Nashville TV Forum.....	Nov.	44
Printing Week to Be Bigger Than Ever in '55....	Nov.	46
Packaging Men Hear Litho Talks.....	Nov.	59
Metal Decorating Convention Report.....	Nov.	75
PIA Discusses Web Offset.....	Dec.	42
LTF Holds Color TV Forum, H. H. Slawson.....	Dec.	36
Dry Offset—Engravers by Default, E. W. Thomas		
	Dec.	40

## CRISP-VELVET-GRAIN



35 years experience graining plates that please both platemaker and pressman

### All sizes ZINC and ALUMINUM PLATES

Ungrained - Grained - Regrained

## WILLY'S Plate Graining Corp.

34-12 10th Street  
Long Island City 6, N. Y.  
Phone RA 8-1526



Member, Lithographic Plate Grainers Association, Inc.

## COOKE PROCESS LENSES



### NOW AVAILABLE AT SPECIAL PRICES

FULLY GUARANTEED-FACTORY COATED

Famous COOKE Series V

- ★ 11 inch F/8 in barrel with Iris . . . . . \$119.99
- ★ 13 inch F/8 in barrel with Iris . . . . . \$139.99
- ★ 16½ inch F/10 in barrel with Iris . . . . . \$179.99

Complete Lens Lab. Facilities

**BURKE & JAMES, INC.** 121 So. Wabash Chicago 4, U.S.A.

## FOR SALE

### Varnishing Machines and Ovens Complete

One 65" Chambers Coater with Christensen Automatic Stream Feeder and semi-automatic delivery, including variable speed control, explosion proof motors, electric counter, Ross hot air gas heat exchanger with enclosed tape conveyor.

Also one duplicate of above without automatic feeder. One Christensen Automatic, dual delivery, gas fired, high speed, Varnish or Lacquer Coater, latest model. Used very little.

Address 612 care

**Modern Lithography**

Box 31, Caldwell, N. J.

## You need the best!

The best plates produce the best printing. Expert offset plate graining saves you money in the long run by permitting quality work and smooth press performance. The skill and experience of ALJEN SERVICE assures the best. Careful and competent handling of your plate problems. Zinc or aluminum plates, any size.

## ALJEN ASSOCIATES

1215 Primrose Street

Cincinnati 23, Ohio

### For good used equipment check



ATF Little Chief, 14 x 20", as is . . . . .	\$ 2,750
Harris LSB, 17 x 22", as is . . . . .	3,000
Harris 128A (LTW), 21 x 28", reconditioned	16,950
Miehle-Roland 29, 21 x 28", as is . . . . .	12,500
Harris LB, 41 x 58", as is . . . . .	6,500

Box No. 1, Modern Lithography

STOP STATIC ELECTRICITY with

**STATIKIL**  
TRADE MARK THE ORIGINAL —  
CANNOT BE DUPLICATED

**GUARANTEED!**  
USED REGULARLY IN THE LARGEST  
PLANTS IN THE NATION  
\$3.00 per can \$30.00 per doz.

**STATIKIL** 1220 WEST 6TH ST.  
CLEVELAND 13, OHIO

STATIKIL—A DIVISION OF THE J. E. DOYLE CO.  
Established 1914

*Just  
Press Button  
and  
Spray*

## WEB OFFSET PRESSES

DESIGNED & BUILT TO  
YOUR SPECIFICATIONS  
BY

**GEORGE  
HANTSCHO**

22½" x 34" HIGH SPEED  
PUBLICATION PRESSES  
NOW IN PRODUCTION

Over 25 years'  
experience  
designing and  
building presses

## GRAPHIC ARTS MACHINERY, INC.

37 South 3rd Avenue • Mount Vernon, N. Y.  
Mount Vernon 7-8200

# 1954 Author Index

	Mo.	Pg.		Mo.	Pg.
<b>A</b>			<b>M</b>		
Aerbersold, Paul C., Use of Radioisotopes for Measuring Ink on Press Rollers.....	Oct.	57	Makarius, Theodore F., Counter Etching; Ghost Images.....	Feb.	53
Archer, H. Brent (co-author), A Practical Method for Determining Color Correction Masking....	May	98	True Reproduction of Image.....	Apr.	46
Audino, H., Varnishing by Roll Coating, Part 2....	Jan.	37	Hints on Dampers and Blankets.....	June	75
Part 3.....	Feb.	40	Inking on the Offset Press.....	Aug.	58
<b>B</b>			Control of Fountain Solutions.....	Sept.	55
Bailey, Fred S., Faster Equipment and Longer Lines.....	July	53	Matlack, Joseph F., Purchasing Lithographic Materials, Supplies and Equipment.....	Nov.	37
Balika, Andrew, Guest Editorial.....	May	33	Maxwell, W. Floyd, Net Profit in Lithography Analyzed; Survey Shows Narrow Margin.....	Aug.	32
Beutner, Grant C., Some Thoughts on Plate Lacquers.....	Jan.	48	Mazzocco, Dante, Trade Shops, Vital Segment of the Industry.....	June	54
Blackman, Saul L., Lithographic Costs, Yesterday, Today and Tomorrow.....	Nov.	40	Morris, Charles V., How You Can Advertise Litho.....	Oct.	48
Blattenberger, Raymond, Offset Comes of Age in the GPO.....	Aug.	35	Mudra, A. E. (co-author), Litho and Tin Deterioration Traced to Canning Process.....	Mar.	63
Brinnick, Frederick E., Presensitized Offset Plates.....	Mar.	52	Mueller, Harry, Review of Offset Plate Developments.....	July	36
Brownson, Congressman Chas. B., Offset vs. Communism.....	Sept.	42	<b>P</b>		
<b>C</b>			Paschel, Herbert P., Photographic Clinic.....	Nov.	45
Crompton, Charles E., Use of Radioisotopes for Measuring Ink on Press Rollers.....	Oct.	57	Paschel, Herbert P., Photographic Clinic.....	Dec.	49
<b>D</b>			Perni, Andy, Elements of Color Process Reproduction, Part 7 Conclusion.....	Jan.	46
Donaldson, Andrew, Procedures in Offset Make-ready.....	Jan.	42	<b>Q</b>		
Drury, Harold, Estimates — Are they accurate? Sales Specs — Are they adequate?.....	Aug.	41	Quinn, Harry, Bearer to Bearer Printing on a Metal Press.....	Apr.	65
Credit Checking and Production Control, Part 3, conclusion.....	Oct.	77	<b>R</b>		
Evaluating Color Copy for Estimating Part 2....	Sept.	50	Reece, Clayton, Color Stripping on Glass.....	June	52
<b>E</b>			Reves, Haviland, Academic Lithography, Part 1.....	Jan.	32
Ernest, Eugene P., How the GPO Controls Static.....	Jan.	44	Part 2.....	Feb.	44
<b>F</b>			Offset Magazines for Negroes Reach 345,000 Circulation.....	Sept.	46
Fay, A. J., Tips on Offset Sales Management.....	Jan.	35	Rhodes, Warren L., (Co-author), A Practical Method for Determining Color Correction Masking.....	May	98
<b>G</b>			Royce, R. (co-author), Litho and Tin Deterioration Traced to Canning Process.....	Mar.	63
Glaser, M. A., Coating Wickets and Cleaning Ovens.....	Jan.	59	Russell, P. R., Cost Study Shows Advantages of Offset for Quarterly of 110,000 Run.....	Feb.	37
<b>H</b>			67-Year-Old Nashville Firm in New Plant.....	July	71
Hallstrom, John L., The Salesman's Place in the Printing Dollar.....	Oct.	46	<b>S</b>		
Hedrick, J. P., Coordination: Sales, Production, Finance.....	Mar.	36	Scheehle, Christian F., Jr., A Review of Progress in Metal Decorating Equipment.....	Sept.	87
Hudders, Milton, How to Plan for New Equipment.....	Oct.	50	Schultz, A. C., Vinyl Coatings in Metal Decorating.....	Dec.	69
<b>J</b>			Shapiro, Charles, Broad Training Needed in Lithographic Skills.....	Apr.	36
Johns, Keith L., The Competition for Process Color Elementary Textbooks.....	May	65	Simon, Irving, Is Offset Suited for Magazine Production?.....	Feb.	34
Jorgensen, George W., Ink-water Balance in Printing.....	Dec.	51	Slawson, H. H., Chicago Union and Employers Launch Dermatitis Research.....	Apr.	45
Junker, William H., Air Conditioning at Palm Brothers.....	Feb.	54	LTF Holds Color TV Forum.....	Dec.	36
<b>K</b>			Safety Programs in Graphic Arts Gain Momentum.....	Nov.	42
Keating, James T., Care of Coating Rollers.....	Oct.	67	Soderstrom, Walter E., Achievement on Long Island.....	Mar.	46
Kennedy, D. Thomas, Is Your Gallery Ready for Color?.....	Aug.	44	Should We Rent or Build the New Plant?.....	May	44
<b>L</b>			Standish, John K., One of Portland's Oldest Companies Produces Diversity of Offset.....	Sept.	48
Latham, Charles W., Photo Composing, Part 1....	Feb.	38	Stout, H. Bettye, Color.....	June	48
Part 2.....	Mar.	38	Straszewicz, L. K., Modern Management in Smaller Plants.....	July	38
Part 3.....	Apr.	39	<b>T</b>		
Part 4.....	May	48	Thomas, E. W., Dry Offset—Engravers by Default.....	Dec.	40
Part 5.....	July	40	Tisne, Jacques, Production Control.....	Feb.	43
Part 8.....	Nov.	57	<b>W</b>		
Part 9 (Conclusion).....	Dec.	45	Walters, W. H., Today's Challenge to Lithographic Management.....	June	37
			Wolff, Scott L. Jr., Promotion and Creative Selling.....	Apr.	42



**'BARTELS'**

**DEVELOPING INK**  
(HYDROGENATED)  
Two Formulas  
Albumen or Deep Etch

GORDON BARTELS CO.  
ROCKFORD, ILL.

**'BARTELS'**

**VINYL LACQUER**  
(WET-WASH RESISTING)  
Two Types  
Albumen or Deep Etch

GORDON BARTELS CO.  
ROCKFORD, ILL.

**'BARTELS'**

**FOUNTAIN SOLUTION**  
BUFFERED P.H.  
Mild Solution — Keeps  
Brass Clean — No Stripping

GORDON BARTELS CO.  
ROCKFORD, ILL.

**"OK"ie Developing Ink**  
**"OK"ie Negative Opaque**

Cameras, Lenses, Screens,  
Arc Lamps, Printing Frames,  
Whirlers and Sundries

Write today for prices and full information

**E. T. Sullebarger Co.**  
900 S. WABASH AVE. CHICAGO (5) 110 FULTON ST. NEW YORK (7)

*Call* **UNIFORM**  
*for superior*  
**PLATE GRAINING**

*Our service designed to meet  
your most exacting requirements.*

**ZINC PLATES — ALUMINUM PLATES**  
Ungrained — Grained — Regraining

**UNIFORM GRAINING CORP.**  
648 N. Western Ave. Chicago 12, Ill.  
HUMBOLDT 6-5512

**W.D. WILSON**  
PRINTING INK COMPANY LTD.  
*Fine Printing Inks*

LETTERPRESS  LITHOGRAPHY

Est. 1865

8-38 46TH AVE., LONG ISLAND CITY, N. Y.  
TEL.: STILLWELL 4-8132

**DRY PLATES**  
**FILM**  
**PHOTO CHEMICALS**

Lenses, Contact Screens  
and accessories for the camera  
and darkroom

**K. SCHLANGER**  
333 West Van Buren St., Chicago 7, Ill.  
WEbster 7540

MAKERS OF THE  
FINEST QUALITY COLOR PLATES  
FOR  
**OFFSET  
LITHOGRAPHY**

THE  
**STEVENSON**  
PHOTO COLOR SEPARATION CO.  
400 PIKE STREET  
CINCINNATI 2, OHIO





# Index to ADVERTISERS

DECEMBER, 1954

Allen Associates .....	120	Graphic Arts Machinery.....	120	Paper Manufacturers Co.....	116
Alum-O-Lith, Inc. ....	Nov.	Graphic Supply Co.....	Nov.	Paul & Co., J. C.....	Nov.
American Graded Sand Co.....	112	M. Grumbacher, Inc.....	118	Photo Litho Plate Graining Co., The.....	118
American Type Founders, Inc.....	Nov.	Gummed Products Co.....	Nov.	Pitman, Harold M., Co.....	13
American Zinc Products Co.....	114			Printing Machinery Co.....	Nov.
Anchor Chemical Co.....	Nov.				
Ansoco .....	17	Hamilton & Son, W. C.....	Nov.	Rapid Roller Co.....	29
Asoplate Corp. ....	Nov.	Hammermill Paper Co.....	Nov.	Reliance Electric & Engineering Co.....	32
		Handschy Co., A. E.....	108	Repro Graphic Machines, Inc.....	Nov.
Baker Reproduction Co.....	Nov.	H. & H. Products Co.....	Nov.	Roberts & Porter, Inc.....	3
Bartels, Gordon .....	122	Harris-Seybold Co. ....	60-61, 120, 4th Cover	Roberts, Lewis, Inc.....	88
Baum, Inc., Russell Ernest.....	116	Hill Rubber Co., Inc.....	Nov.	Rogers Co., The Harry H.....	Nov.
Beckett Paper Co.....	19-20	Howard Paper Co.....	63-64	Roll-O-Graphic Corp. ....	96
Bingham's Son Mfg. Co., Sam'l.....	118	Hunt Co., Philip A.....	Nov.		
Bridgeport Engravers Supply Co.....	98				
W. A. Brown Mfg. Co.....	93	Ideal Roller & Manufacturing Co.....	87	Schlanger, K. ....	122
Buckbee-Mears Co. ....	118	Illinois Zinc Co.....	116	Schmidt, H., & Co.....	Nov.
Burke & James, Inc.....	120	Interchemical Corp., Printing Ink Div.....	82-83	Schultz, H. J.....	114
		International Press Cleaner & Mfg. Co.....	110	Schweitzer & Co., Peter J.....	Nov.
		International Paper Co.....	6	Seranton Plastic Laminating Co.....	107
		Intertype Corp. ....	4	Scriber Specialties .....	Nov.
California Ink Co.....	Nov.	Jomac Products .....	80	Senefelder Co.....	2nd Cover
Cambridge Instrument Co.....	Nov.			Siebold, J. H., & G. B., Inc.....	31
Cantine Co., Martin.....	3rd Cover	Kimberly-Clark Corp. ....	8-9	Simco Co., The.....	Nov.
Central Compounding Co.....	Nov.	Kleen-stik Products, Inc.....	109	Sinclair and Carroll Co.....	34
Champion Paper Co.....	57-58	Knox Soap Co.....	76	Sinclair & Valentine Co.....	33
Champlain Co., Inc.....	Nov.			Strathmore Paper Co.....	16
Chatfield Mfg. Co.....	120	Lawrence Graphic Supply Co.....	Nov.	Stevenson Photo Color Separation Co., The	122
Chemco Photoproducts Co.....	14	Lawson Co., E. P.....	65	Strong Electric Corp.....	21
Chicago Litho Plate Graining Co.....	116	Leedal Stainless Steel Products, Inc.....	110	St. Regis Paper Co.....	85-86
Crescent Ink & Color Co.....	Nov.	Litho Chemical & Supply Co.....	11	Sullebarger Co., E. E.....	122
Cramer, C., Dry Plate Co.....	Nov.	Lithographic Plate Graining Co. of America .....	102		
		Lith-o-Graph Products .....	118	Tittelbaum, N., Sons.....	Nov.
Dayton Rubber Co.....	74-75			Tickle Engineering Works, Inc., Arthur...	Nov.
Dexter Folder Co.....	10	Mallinckrodt Chemical Works.....	18	Toledo Lithograin & Plate Co.....	118
Direct Reproduction Corp.....	104	Mathiessen & Hegeler Zinc Co.....	Nov.	Turner Printing Machinery, Inc.....	Nov.
Doyle, J. E., Statikil Div.....	120	McAdams & Sons, John.....	Nov.		
duPont de Nemours & Co., E. I.....	Nov.	Mead Corp., The.....	15	Uniform Graining Corp.....	122
		Miehle Printing Press & Mfg. Co.....	28	United Mfg. Corp.....	115
		Miller Printing Machinery Co.....	Nov.		
Eastman Kodak Co. ....	55	Minnesota Mining & Manufacturing Co....	56	Wagner Litho Machinery Div.....	70-71
		Moore Laboratories .....	Nov.	Warren Co., S. D.....	91-92
Fitchburg Paper Co.....	26			Wesel Mfg. Co.....	Nov.
Flint Ink Co., Howard.....	Nov.	National Assn. of Photo-Lithographers....	12	Western Litho Plate & Supply Co.....	114
Fox River Paper Co.....	Nov.	National Carbon Co., Div. of Union Carbide & Carbon Co.....	Nov.	Weston Co., Byron.....	66
Fraser Paper, Ltd.....	Nov.	National Steel & Copper Plate Co.....	106	West Va. Pulp and Paper Co.....	22-23
French, Charles A. Co.....	Nov.	Nekoosa Edwards Paper Co.....	25	Whale Safety Paper Co.....	Nov.
		Norman Willets Graphic Supply Co.....	Nov.	Willoughby.....	96
Gaetjens, Berger & Wirth.....	Nov.	Northwest Paper Co.....	Nov.	Willy's Plate Graining Corp.....	120
Gegenheimer Co., Wm.....	Nov.	Nuclear Products Co.....	Nov.	Wilson Printing Ink Co., Ltd., W. D.....	122
General Plate Makers Supply Co.....	Nov.			Winsor & Newton, Inc.....	108
General Research & Supply Co.....	100	Offen & Co., B.....	Nov.	Zarwell & Becker.....	Nov.
Gevaert Co. of America Inc.....	24	Oxford Paper Co.....	30		
Goetz American Optical Co., C. P.....	95	Ozalid .....	27		
Goodyear Tire & Rubber Co.....	7				
Graphic Arts Corp. of Ohio.....	112				
Graphic Arts Employment.....	Nov.				

(The advertisers' Index has been carefully checked but no responsibility can be assumed for errors or omissions.)

## Tale Endo

HERE'S an idea offered by the International Printing Week Committee, of which Floyd C. Larson, director, Navy Printing Office, Great Lakes, Ill., is chairman:

"Did you ever stop to think how EASY it would be for YOU to have an open house at your printing plant during Printing Week next January? Did you ever stop to think how much it would bring you in good customer relations and improved morale among your workers? Did you consider the good it would do just to get the plant cleaned up spic and span for an open house? Have you thought of the value of having employees' families visit the shop? There is so much to be gained at so little cost — and nothing to lose, certainly."

★

Time has not been hanging heavy the past summer around Brooks Ely, superintendent of Uniform Printing & Supply, Chicago commercial offset plant operated as a division of a Lowell, Mass., newspaper. Mr. Ely is a "do-it-yourself" man and when not doing it for Uniform P. & S. he has been out in suburban Libertyville building himself a new home. He's been doing just about everything from drafting the blueprints to driving the nails and at last report had everything under control so he could move the family in before winter arrives.

★

A 12 x 9" spiral bound brochure showing "Micro-Color" lithography has just been distributed by the W. A. Krueger Co., Milwaukee. It describes many services offered by the company, shows in full color numerous jobs which the company produces, and illustrates various

steps in the lithographic process. The company produces a wide range of full color advertising material as well as several periodicals, including

*Arizona Highways, Horticulture, and This is Wisconsin.*

One spread features a schematic drawing of the layout of the big plant, and another shows in full color, a Harris 52 x 76" four-color offset press such as the firm operates.

★

A total of 205 Chicago printing plant employees are registered in the eight courses being offered by the Graphic Arts Association of Illinois this year. Printing Fundamentals, a new course, attracted 52, the largest of any of the classes.★★



## From Us to You...

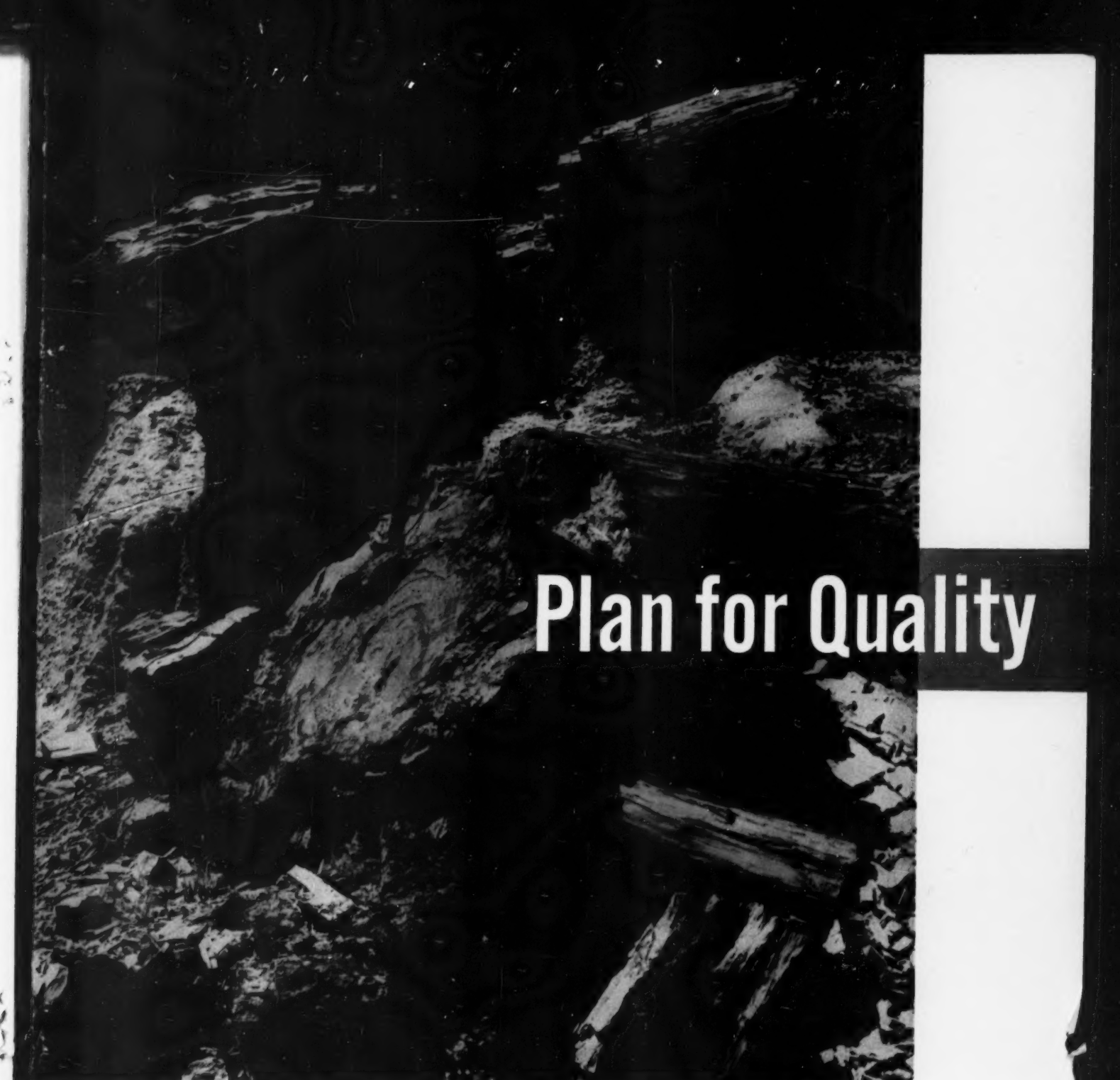
GREETINGS and salutations! Christmas and the New Year are almost upon us once again. To our readers, our advertisers, our many friends all over the world, we want to extend in this our 22nd year, heartiest holiday greetings, from

# MODERN LITHOGRAPHY

BOX 31

CALDWELL, N. J.

Member, Audit Bureau of Circulations



# Plan for Quality

## *Cantine's* COATED PAPERS

### LETTERPRESS

Hi-Arts	Catskill
Ashokan	Velvetone
M-C Folding	Softone
Book and Cover	Esopus Tints
Zena	Esopus Postcard

### OFFSET-LITHO

Hi-Arts Litho C.1S.	Catskill Litho C.1S.
Zenagloss Offset C.2S.	Catskill Offset C.2S.
Book and Cover	Esopus Postcard C.2S.
Lithogloss C.13.	

*Great petrified logs of ancient trees. Blue Forest of Arizona. Photo by Muench.*

Like a petrified forest, fine quality printed matter may retain its beauty, meaning, interest and value for many years after its immediate purpose has been served. Plan always for the fine and lasting quality that can be attained by letterpress or offset on the superb coated papers from Cantine's. Ask your local merchant.

### THE MARTIN CANTINE COMPANY

*Specialists in Coated Papers Since 1888*

SAUGERTIES, N. Y. Branches: NEW YORK and CHICAGO

*(In Los Angeles and San Francisco: Wylie & Davis)*





## New Harris 3 in 1 Solution obsoletes present way of making presensitized plates

"Rub it on . . . wipe it off!" That's all you do to process a Harris presensitized photo-offset plate. This amazing new *3 in 1 Solution* replaces (1) Desensitizer, (2) Lacquer, and (3) Gum. No wonder it cuts processing time in half and reduces the possibility of error. It's the biggest advance in platemaking since presensitized plates were introduced.

First, expose a Harris plate in the conventional manner. Then pour a small amount of new *3 in 1 Solution* on the plate. Using a sponge dampened in water, rub the entire surface of the plate thoroughly so that the non-printing areas are completely desensitized and the image area is completely developed. Now, wipe the plate dry. That's all! Your plate is ready for the press.

Be sure you benefit from the savings and convenience offered by this new Harris *3 in 1 Solution*. Look how economical it is:

1 pint (12 per case)	\$ 2.50 each
1 quart (12 per case)	4.25 each
1 gallon (12 per case)	15.00 each

(Prices slightly higher in Canada)

Why not order your first Harris *3 in 1 Solution* from your nearest Harris dealer today? Or, mail the coupon for additional information.

**HARRIS-SEYBOLD COMPANY**

*Chemical Division*

Harris Division • Seybold Division • Chemical Division • Special Products Division  
C.B. Cottrell & Sons Company • Macey Company • Harris-Seybold (Canada), Limited

Harris-Seybold Company, Chemical Division, Dept. E  
5308 Blanche Ave., Cleveland 27, Ohio

Please send me complete details about the new Harris *3 in 1 Solution* and about Harris presensitized plates. Also, send me the name of my nearest dealer.

MR. \_\_\_\_\_

COMPANY \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

